

MARCH 15, 1955

MODERN MEDICINE

The Journal of Diagnosis and Treatment



Management
of Backache

by Dr. F. J. Kottke

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1. McHardy and Browne: Sou. Med. J. 45:1139, 1952. 2. Lorber
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1. Winsor, T., and Humphreys, P.: *Angiology* 3:1 (Feb.) 1952. 2. Plotz, M.: *New York State J. Med.* 52:2012 (Aug. 15) 1952. 3. Dailheu-Geoffroy, P.: *L'Ouest-Médical*, vol. 3 (July) 1950.

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Editor-in-Chief

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1. Weinberg, Arthur, and Werner, W. E. E: Bonadoxin, a New Effective Oral Therapy for Hyperemesis Gravidarum, New York Medical College and Hockaway Beach Hospital, 1954.
2. Personal communication.



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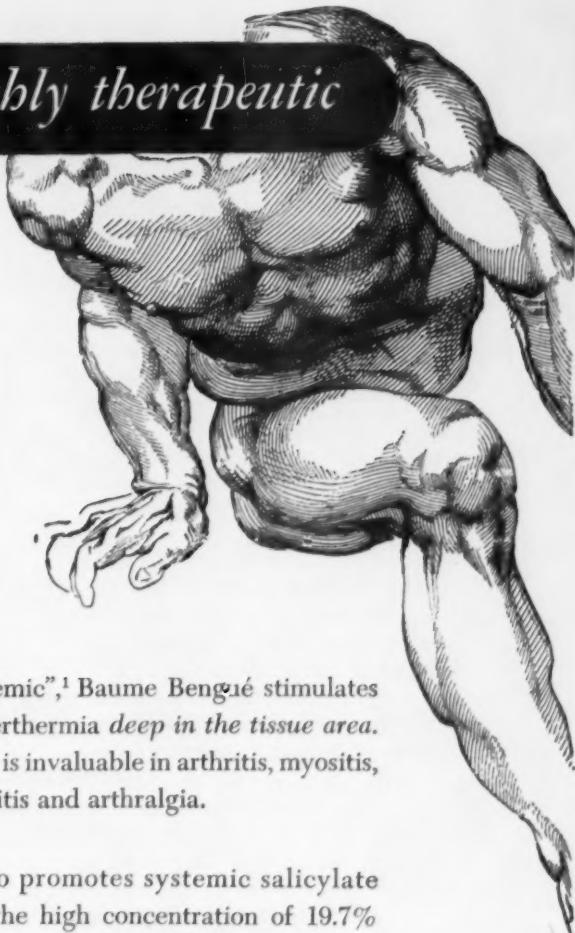
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in psoriasis 79%

of cases treated
with Entozyme alone

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Entozyme provides pancreatic enzymes to help restore normal metabolism, so commonly disordered in the psoriatic . . . and thus represents an effective systemic approach to successful therapy.

*Ingels, A. H.: California Medicine 79:637, 1953.



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—in its gastric-soluble outer
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LETTER FROM THE EDITORS

Dear Reader:

We want to pass out a few bouquets to the men and women listed on pages 12 and 14. These are the members of the National Editorial and Consultant boards. Membership entails an obligation that has been, and is being, faithfully discharged: the speedy dissemination of news of the developments in medicine to the largest possible number of active practitioners.

The board members are largely responsible for the selection of articles to be reported in *Modern Medicine*. In other ways, too, they give counsel and help. Their only compensation is the satisfaction they can take in making this publication as useful as possible to you, the physicians of America.

The boards are not static. Changes are made from time to time. It is only reasonable that after a stint of public service some relief is forthcoming. Lately, Drs. Case, Dickson, Hess, Lanza, Lewis, Meyer, Patterson, Rose, Strickler, Torpin, and Wood have become our "elder statesmen." Relieved of the pressure of active editorial participation, they will continue to exercise their influence from an emeritus status.

The continuing members, Drs. Baehr, Benedict, Hansen, Hoover, Krantz, Livermore, Lynch, MacBryde, Masten, Myers, Ochsner, Plimpton, Reed, Reeves, Rigler, Rusk, Siddal, Stirling, Turell, Wilbur, and Wright, are being joined by Drs. Bryner, Ceder, Dripps, Greenhill, Grimson, Hildebrand, Hilleboe, Key, Robins, Stenstrom, and Stout.

We wish it were possible to do more than just list names, but we are nearing the bottom of the page. To each and every one of these dedicated persons, the editors want to express thanks and gratitude. Without their unselfish help and cooperation an endeavor such as *Modern Medicine* would be impossible.

The Editors



The expanding scope of a versatile new drug **THORAZINE***

'Thorazine' has achieved dramatic results in many major clinical applications:

In **nausea and vomiting**, 'Thorazine' has become established as specific for the prompt control of severe symptoms.

In **mental and emotional disturbances**, 'Thorazine' has rapidly become a standard therapy, often relieving conditions heretofore refractory to any pharmacological measures.

In the treatment of **pain**, 'Thorazine' has assumed an important role as a potentiator of analgesics, making it possible to use much smaller doses of narcotics or less potent narcotics.

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It is indeed remarkable that so many of the early pharmacologic conjectures as to 'Thorazine' have so soon become established clinical realities. This is, of course, due to the widespread and intense medical interest in the drug, on which new articles are constantly appearing.

'Thorazine' Hydrochloride is available in 10 mg., 25 mg., 50 mg. and 100 mg. tablets; 25 mg. (1 cc.) and 50 mg. (2 cc.) ampuls; and syrup (10 mg./5 cc.).

For information write

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HERPES ZOSTER...

**Even after 60,
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WINDSOR • DETROIT 19, MICH. • LOS ANGELES

Clinical data on request

*Combes, F. C. & Canizares, O.:
New York St. J. Med. 52:706, 1952.

Correspondence

Communications from the readers of MODERN MEDICINE are always welcome. Address communications to The Editors, MODERN MEDICINE, 84 South 10th St., Minneapolis 3, Minn.

Confusing Modifier

TO THE EDITORS: The unfortunate placement of the modifying phrase "regardless of palpable mesenteric nodes" in the next to the last paragraph of the report of my article on adenomatous polyps of the large bowel (*Modern Medicine*, Nov. 15, 1954, p. 118) may lead some readers to misinterpret my meaning. It should have been the opening phrase of the succeeding sentence. For the sake of clarity I repeat: "In the presence of induration of any part of the polyp or fixation at the base with or without palpable mesenteric lymph nodes, segmental colonic resection with the mesentery should be done."

ROBERT TURELL, M.D.
New York City

Poor Brand of Medicine

TO THE EDITORS: Antibiotics are abused but not as much as Col. Charles H. Morhouse thinks (*Modern Medicine*, Jan. 15, 1955, p. 26). I believe that to deprive a seriously ill, febrile patient of antibiotics for days in order to get a culture report first is just as poor a brand of medicine as not using the other tools of medicine when indicated.

ALLISON B. WILLEFORD, M.D.
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**effective blood levels
within one hour**

DELTAMIDE®

the preferred quadri-sulfa mixture

Combines 4 of the most useful sulfonamides for . . .

- effective blood levels in most patients within one hour
- increased solubility in the urine
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COMPOSITION: Each tablet or teaspoonful of the delicious chocolate-flavored suspension contains—

Sulfadiazine	0.167 Gm.
Sulfamerazine	0.167 Gm.
Sulfamethazine	0.056 Gm.
Sulfacetamide	0.111 Gm.

Bottles of 100 and 1000.

Suspension, 4 and 16 oz. bottles.



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CORRESPONDENCE

Suits for Korean Doctors

TO THE EDITORS: Last summer your correspondence column carried a letter from me (*Modern Medicine*, Aug. 15, 1954, p. 14) appealing to the physicians of America to contribute \$20 each to provide physicians in Korea with a "suit package."

Your readers may be interested to know that \$27,242 was contributed to this project as of December 31. Approximately 1,360 packages have now been delivered in Korea. They have been warmly received as symbols of friendship between the professions of our two nations.

Since its inception, the American-Korean Foundation has received and shipped to Korea goods and

equipment valued conservatively at \$12,000,000 and has expended or budgeted over \$2,500,000 to support Korean health, social welfare, and educational projects.

Some of our major activities in health have included:

- Assistance ranging from full expenses to ocean transportation only for 77 Korean physicians, dentists, nurses, and other personnel receiving advanced training in American schools and hospitals
- Grants totaling \$111,233.83 to assist schools, orphanages, colleges, hospitals, leprosaria, and other institutions to meet local labor and material costs in building projects for which materials and technical assistance are provided by the Armed Forces Aid to Korea Program
- Provision of equipment, supplies, and one year of advanced training in the United States for three staff members of the National Institute for the Prevention of Infectious Diseases in Korea

(Continued on page 26)

DORIDEN
(glutethimide CIBA)

totally new nonbarbiturate hypnotic-sedative

In most cases —	Dosage:
Rapid onset—15-20 minutes	0.25 to 0.5 Gm. before bedtime.
Lasts 4-8 hours	Scored 0.25- and 0.5-Gm. tablets.
No hangover	

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TOPICAL LOTION

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MOST EFFECTIVE

Therapeutically active in 1/10th the concentration
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Superior spreading qualities—a small quantity covers a wide area.

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Most patients prefer the cosmetic advantages of this easy-to-apply,
smooth spreading lotion.

Supplied in a cosmetically elegant base in
two concentrations: 0.25% and 0.1% in 15
cc. plastic squeeze bottles.
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ANTI-INFLAMMATORY AGENT YET DEVELOPED FOR TOPICAL USE



When your ears tell you that a patient may be "caffeine sensitive," he doesn't have to give up drinking coffee. He only needs to give up drinking caffeine. Why not suggest Sanka Coffee—97% caffeine-free?

New extra-rich Sanka is a wonderful coffee, Doctor. You'll enjoy it yourself.



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DELICIOUS IN EITHER INSTANT OR REGULAR FORM

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Every B-complex factor, including B₁₂ and Folic Acid, is contained in LEDERPLEX Liquid. This well-tolerated preparation is derived from pure beef liver, the best natural source of the B vitamins and those unidentified factors of nutritional importance. A natural orange flavor is added for palatability.

Dosage: As a dietary supplement, the usual dose of LEDERPLEX Liquid is 1 or 2 teaspoonfuls daily. For treatment, dosage should be increased and fortified with those specific vitamins found lacking.

Each teaspoonful (4 cc.) of LEDERPLEX Liquid contains:

Thiamine HCl (B₁) ... 2 mg.

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Soluble Liver Fraction ... 470 mg.

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The new antitussive . . . **CLISTIN®**

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coughs of allergic

Clistin Maleate* . . . the new antihistamine

Patients will be delighted



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and refreshing yellow color

Clistin Expectorant is non-narcotic . . . compatible,

desired.



It does not numb

The combination of expectorants gives an additive effect,

demulcent base soothes

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Each 30 cc. (1 fl. oz.) contains:

Clistin Maleate (Carbinoxamine Maleate, McNeil) . . .	12 mg.
Ammonium Chloride . . .	0.8 Gm. (12 gr.)
Sodium Citrate . . .	0.8 Gm. (12 gr.)
Potassium Guaiacolsulfonate . . .	0.4 Gm. (6 gr.)
Chloroform . . .	0.06 cc. (1 min.)
Benzyl Alcohol . . .	0.3% (v/v)

Pints and Gallons

CLINICAL SAMPLES ON REQUEST

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LABORATORIES, INC.
PHILADELPHIA 32, PA.

EXPECTORANT . . . for coughs associated



or non-allergic



origin...contains

of unsurpassed therapeutic potency and safety.

Clistin Expectorant's appealing fruity flavor



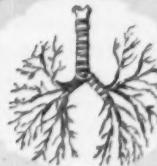
however, with commonly used narcotic salts if so

the mouth or upset the stomach



yet minimizes digestive disturbances. Its special

local irritation



For coughs

that "hang on"
... try

CLISTIN[®]
EXPECTORANT

*Carbinoxamine
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the pleasant physiologic corrective for

constipation in children

tastes
like
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pudding



neo-cultol

L. Acidophilus in chocolate-flavored
mineral oil jelly

NEO-CULTOL acts to restore and maintain normal, peristalsis in children naturally, safely, pleasantly. It implants in the intestines the normal aciduric flora necessary to healthy bowel movements. At the same time it lubricates, softens the colon contents to prevent dry, "constipated" feces. No phenolphthalein, no salts, no bulk, no roughage.

samples on request, send coupon.

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Send me
clinical samples of neo-cultol

Dr. _____

Address _____

- Provision of an international staff, equipment, and funds for the 300-patient National Rehabilitation Center at Tongnae which is now providing rehabilitation, artificial limbs, and vocational training for 106 Korean war disabled
- Allocation of funds to meet operational costs and strengthen the programs of orphanages, schools, hospitals, clinics, and homes for the disabled and aged
- Financial aid and consultation service for the South Korean Medical Association, the Korean National Nurses Association, Korean Dental Association, Korean National Tuberculosis Association, and other provisional and voluntary medical and health associations
- Provision of funds for expanding and strengthening training in 12 Korean schools of nursing and provision of fellowships for study abroad for nurse leaders
- Provision of personnel and related services for the Nursing Services Division, Tuberculosis Control Division, and the Leprosy Control Division of the Korean Ministry of Health and Adoption Unit in Korean Ministry of Social Affairs
- Financial assistance and equipment in establishing, improving, or expanding technical training of personnel for tuberculosis control and midwives
- Provision of consultation services, scholarships, equipment, and other related services for strengthening the program of the Seoul National University College of Dentistry
- Provision of professional and administrative staff and a portion of operational costs of the Korean School of Public Health

Our suit project and the other health and medical programs in Korea are still in operation. The American-Korean Foundation, 345 East 46th Street, New York City 17, will be most happy to receive specific contributions. Such contributions are tax-deductible. By continuing to aid this newest of free republics, we in the United States are not only helping the Koreans to help themselves but are demonstrating to the world that we in a democracy stand by those who resist Communist aggression.

HOWARD A. RUSK, M.D.
Chairman

New York City

Inhalation Methods

TO THE EDITORS: In the excellent Special Article on cough by Dr. Andrew L. Banyai (*Modern Medicine*, Nov. 15, 1954, p. 73) we feel there was an unfair credit omission in the paragraph dealing with aminophylline. Prigal and associates, who were properly credited with introducing inhalation of aminophylline as an aerosol, were also credited with devising the electric inhalation apparatus for such administration.

The steam aerosolizer was devised and perfected by Mr. Max Katzman of the Kaz Manufacturing Company, upon the request of Dr. Prigal, who was seeking a steam generator capable of aerosolizing nonvolatile antibiotics.

We would also call Dr. Banyai's attention to the remarks on mucosal secretions; he states that "one may resort to a home-made inhaler or to a special electrical steam inhaler." We are unaware of any "home-made inhaler" that is free of burn or fire hazard. With today's completely safe and efficient electric vaporizers, we feel that it is unwise to recommend home-made inhalers.

LAWRENCE KATZMAN

New York City

The inventor of the electric vaporizer deserves credit for devising the inhalation apparatus used by Dr. Prigal. Description of it can be found in Dr. Prigal's original article.

While the usefulness of this apparatus is beyond doubt, circumstances may oblige one to resort to other sources of steam inhalation. For instance, in urgent cases or in rural or small urban communities, it is expedient to administer steam by simple, readily available, time-tested, "old-fashioned" means. Even in large cities, financial limitations or pressing de-

(Continued on page 32)

ideal.

physiologic

corrective for

constipation
in the elderly



neo-cultol

L. Acidophilus in chocolate-flavored
mineral oil jelly

NEO-CULTOL works naturally toward restoring to the intestines of older patients the normal aciduric flora that is so frequently lacking... to provide lubrication to feces that are so often dry... to avoid distressing flatulence by suppressing putrefactive bacteria.

NEO-CULTOL is pleasant to use—because of its chocolate pudding flavor—because there is no griping, no rush, no strain, no leakage.

send coupon for **samples**

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I would like to try **neo-cultol**

Send samples to ...

Dr. _____

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Planning the Low-Purine Diet for a long run...

Imagination is essential to this diet since your patient may have to follow it for many years. These diet "do's" can show him how to use eggs, cheese, and milk—a trio of almost purine-free foods—to supply most of his protein.

In these, the trio plays a solo—

Eggs baked in pimiento-flecked cheese sauce are gay and tempting.

A casserole of eggplant and tomatoes layered with cottage cheese and topped with grated parmesan makes a satisfying entree.

Eggs poached in tomato juice can be served in a soup bowl with a frill of chopped parsley on top.

In these, the trio plays accompaniment—

Ham 'n egg rolls come hot or cold. For hot, roll a warm slice of ham around scrambled eggs. For cold, roll ham around egg salad mixed with cottage cheese.

Oyster stew can be creamy without cream when the milk is bolstered with dry skim milk powder. A pinch of thyme adds savor.

Broiled salmon or tuna-burgers nestle nicely in a nest of noodles. A slice of cheese on top broils to a bubbling brown.

These suggestions are only a few of the possible combinations of this versatile trio. And the adequate protein nutrition they make possible, plus a liberal intake of fluids, may help establish a regimen that will please you both.



United States Brewers Foundation

Beer—America's Beverage of Moderation

104 calories, 17 mg. sodium/8 oz. glass*

If you'd like reprints for your patients, please write United States Brewers Foundation,
535 Fifth Avenue, New York 17, N. Y.

*Average of American beers



'For many years the natives of the Dutch Indies have used the squeezed juice of the Curcuma in the treatment of diseases of the liver'

Gallogen

Gallogen (gal-o-jen) is the Massengill name for the synthesized active principle of the ancient drug Curcuma. The isolation and synthesis of the active principle permits the administration of a pure, standardized form of the drug. Gallogen is a true choleric, not a bile salt.

Gallogen acts directly on the hepatic cells. It stimulates the flow of bile which is whole in volume and composition. The choleresis is in proportion to the functional capacity of the liver and is prompt and lasting.

Gallogen is indicated whenever it is desirable to increase the flow of bile, encourage activity of the gallbladder and promote normal function of the biliary system.

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Supply: In bottles of 100 and 1000 tablets containing 75 mg. of the diethanolamine salt of the mono-d-camphoric acid ester of p-tolylmethyl carbinol.

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TRI-SYNAR

triple synergism in
the control of SPASM

Tri-Synar is predominantly a parasympathetic sedative and combines anticholinergic, antihistaminic and direct musculotropic action.

Now, with Tri-Synar, you can control smooth muscle spasm with only a fraction of the usual dose of belladonna. Extensive clinical studies show that effects are truly therapeutic. Belladonna side actions are seldom, if ever, encountered.

Triple synergism—implying triple points of attack—greatly increases the range of usefulness of Tri-Synar

Musculotropic



Each Tri-Synar tablet contains:

Powdered Extract of Belladonna* 4.1 mg.

Phenyltoloxamine 20.0 mg.

Ethaverine Hydrochloride 20.0 mg.

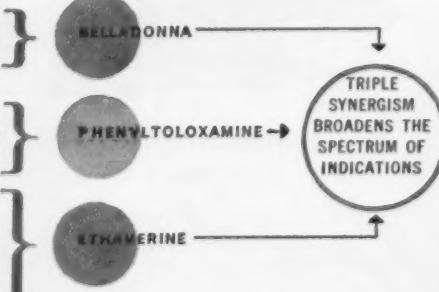
*The amount of belladonna is equivalent to 2.5 minimis of tincture of belladonna.

Supplied in bottles of 100 tablets.

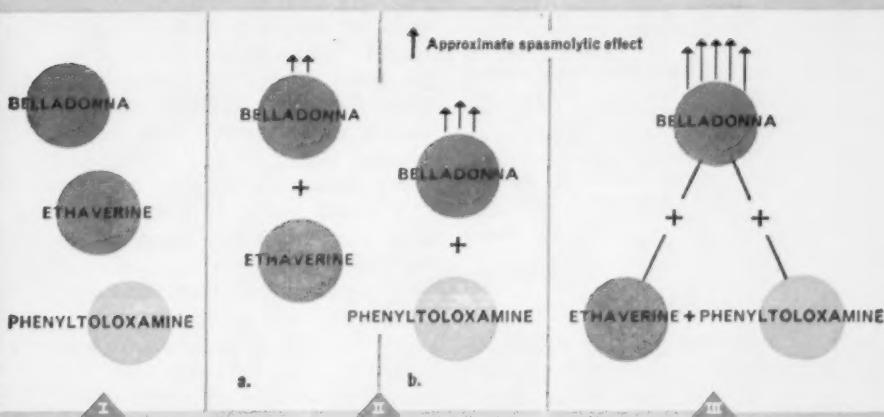
Excellent anticholinergic effect
Antihistaminic effect

Excellent antihistaminic effect
Low toxicity (drowsiness remarkably rare)
Atropine-like effect

Musculotropic effect
Excellent in inhibiting smooth muscle spasm
of gastrointestinal and biliary tract
Atropine-like effect
Free of addicting properties



TRIPLE SYNERGISM PROFOUNDLY MAGNIFIES THERAPEUTIC EFFICACY



None of the three drugs in the small amounts used produces an appreciable effect, when given alone.

a. When ethaverine is added to belladonna, the effect is negligible.

b. When phenyltoloxamine is added to belladonna, a definite though moderate effect occurs.

When all three drugs—belladonna, ethaverine and phenyltoloxamine—are applied simultaneously, a profound effect (100% protection against experimentally induced spasm) is evident.

TRI-SYNAR

Clinical Indications

- Spastic and functional conditions of the gastrointestinal tract (including spastic colitis, epigastric distress, adjunctive therapy in peptic ulcer, spastic constipation).
- Biliary syndrome (dyskinesia, cholecystitis)
- Primary dysmenorrhea • Vomiting of pregnancy
- Dysuria and mild ureteral spasms

Dosage and Administration

1 tablet t.i.d. or q.i.d.; in the more severe cases, 2 tablets t.i.d.



THE ARMOUR LABORATORIES

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CORRESPONDENCE

mands of the situation may make home-made inhalers preferable. In most instances, the welfare of the patient requires immediate intervention. Promptly and consistently given, steam inhalations may be lifesaving or, in less critical cases, may bring about satisfactory alleviation of the patient's cough and dyspnea. Obviously, the source of steam and the method of its delivery are of secondary importance. Old methods of proved therapeutic value do not deteriorate like old machines.—Ed.

Medication for Warts

TO THE EDITORS: An article on treatment of warts with methionine by T. P. Merklen in *La Presse Medicale* (62:8, 1954) described how he noted improvement in warts

while giving methionine for hepatic disorders.

I have used methionine, 0.5 gm. daily, in several patients with good results. Painful plantar warts, multiple hand warts, horny warts, and large flat warty growths have all shown improvement. Pain in the plantar warts was relieved and many completely disappeared.

I would be very interested to hear from others who are using this method or who are willing to try it. A 1½-gr. tablet is given once daily to a child and twice daily to an adult, though some adults have been given 4 a day. Results were obtained in one to two weeks.

CARL B. ALDEN, M.D.
Adams, N.Y.



Each tablet contains:

Promabrom 50 mg.
Acetophenetidin 100 mg.

Dose: One tablet q.i.d. starting 5 days before expected onset of menses.

Women's Tension Symptoms Are Different!

When . . . abdominal bloating, heavy, tender breasts, puffiness of hands, face, legs, headaches, backache, mental depression, and explosive irritability, appear regularly before menstruation . . . consider premenstrual tension. These symptoms are due to an excess fluid accumulation. Because they are not of psychic origin, they do not respond to the usual sedatives and anti-spasmodics.

M-Minus 5 effectively reduces premenstrual excess fluid accumulation, and controls symptoms . . . in 82% of cases.¹ By reducing the primary stimulus to uterine spasm, M-Minus 5 controls dysmenorrhea. M-Minus 5 is not a hormone, sedative or narcotic, and does not interfere with the normal menstrual cycle.

1. Vainder, M.: Indus. Med. & Surg., 22:183, 1953. ®

M-Minus 5

PREMENSTRUAL DIURETIC AND ANALGESIC
for Premenstrual Tension and Dysmenorrhea

WHITTIER LABORATORIES, 919 N. Michigan Ave., Chicago 11, Ill.

FOR SUPERIOR PERFORMANCE —



POLYCYCLINE is a antibiotic produced by the unique
bifid process of direct fermentation from a new species of
Streptomyces. Its basic structural formula (as compared with
older analogues) gives significantly superior clinical performance.

*The most modern
Broad-Spectrum Antibiotic*

AVAILABLE AS



**POLYCYCLINE
SUSPENSION '250'**

Ready to use without reconstitution, stable for 18 months without refrigeration.
Really palatable.
— in concentration of 250 mg. per 5 cc., in bottles of 30 cc.

POLYCYCLINE

(TETRACYCLINE BRISTOL)



Polycycline is a tetracycline produced by the unique Bristol process of direct fermentation from a new species of *Streptomyces* isolated

by Bristol Laboratories . . . rather than made by the chemical modification of older broad-spectrum antibiotics.

Like its older analogues, it is

EFFECTIVE IN BROAD RANGE

against gram-positive and gram-negative organisms, certain rickettsiae and large viruses.

Unlike its older analogues, it has a

BASIC STRUCTURAL FORMULA

no chlorine atom (present in chlortetracycline); and no hydroxyl group (present in oxytetracycline).

SUPERIOR CLINICAL PERFORMANCE

greater tolerance: markedly lower incidence and severity of adverse side effects.

greater solubility than chlortetracycline, yielding quicker absorption and wider diffusion in body fluids and tissues.

greater stability in solution than chlortetracycline or oxytetracycline, permitting higher, more sustained blood levels.



**POLYCYCLINE
PEDIATRIC DROPS**

For accurate dosage in small amounts.
— in concentration of 100 mg. per cc., in bottles of 10 cc. with dropper calibrated for administration of 25 or 50 mg.



**POLYCYCLINE
CAPSULES**

Handy form for oral use, in two potencies:
— in capsules of 100 mg., in bottles of 25 and 100.
— in capsules of 250 mg., in bottles of 16 and 100.



**POLYCYCLINE
INTRAMUSCULAR**

For deep intramuscular injection.
— in vials of 100 mg. per vial.



When you think of Tetracycline, think of POLYCYCLINE

Forensic Medicine

ARTHUR L. H. STREET, LL.B.

*Prepared especially for
Modern Medicine*

Compensation—Liability

PROBLEM: An employer failed to provide medical attention for an injured worker within a reasonable time after knowing that the attention was required. Was he liable for expenses when the injured man procured treatment without first making demand of the employer?

COURT'S ANSWER: Yes.

So decided the Oklahoma Supreme Court (276 Pac. 2d 759).

Malpractice—Fixing Blame

PROBLEM: Pressure was exerted against a patient's shoulder during an operation injuring a nerve. A group of 3 doctors and 3 nurses had participated in the operation. There was no proof of who caused the injury. Could any one of the doctors or nurses be held liable?

COURT'S ANSWER: No.

The California District Court of Appeal, Second District, said it could be inferred that someone was negligent, but the guilty party could not be identified. The patient's damage suit was dismissed (146 Pac. 2d 982).

Expert Testimony—Opinions

PROBLEM: At a homicide trial, evidence pointed toward criminal strangulation. Accused's lawyer asked a medical expert whether death by strangulation might occur through combination of a defective heart and regurgitation of food lodged in the larynx. Did the trial judge properly exclude the question since no evidence showed that food had lodged in the larynx?

COURT'S ANSWER: Yes.

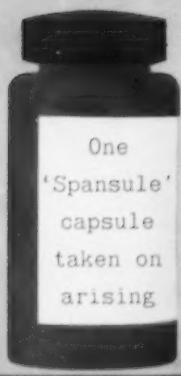
The Iowa Supreme Court applied the fundamental rule that a medical opinion cannot be called for upon an hypothesis of a fact not shown by evidence (155 N.W. 837).

Damages—Disabled Physician

PROBLEM: A doctor injured in an auto accident did not prove permanent injury but did show income loss of \$5,311.36 during five weeks of total incapacity for practice and \$3,785.97 while partially incapacitated for nine months and medical expenses of \$448.80. A jury awarded him \$10,546.13 damages, allowing \$1,000 for physical suffering. Was the award excessive?

COURT'S ANSWER: No.

So decided a United States District judge in Indiana. Testifying in his own behalf, the doctor said that he had symptoms of a ruptured intervertebral disk, but that surgery would be necessary to determine the nature of the injury. A neurosurgeon stated that there was a loss of nerve cell function in the spinal cord but that it was uncertain what the end result of the condition would be (125 Fed. Supp. 341).



"Unfortunately," writes Dr. B. Wheeler Jenkins,¹ "with most orally administered drugs, the minimum dose is three a day, which is about two doses too many for the average patient to remember."

But patients can remember one dose a day

To overcome patients' forgetfulness, Dr. Jenkins suggests 'Spansule' sustained release capsules because "they can be prescribed for the one period of the day that is free of distraction and controlled completely by routine—the period before breakfast . . ."

See the following pages for information on medication now available in

Spansule*
brand of sustained release capsules



important: 'Spansule' capsules are made *only* by Smith, Kline & French Laboratories, Philadelphia—the originators of sustained release oral medication—and every capsule bears the monogram "SKF".

*T.M. Reg. U.S. Pat. Off. for S.K.F.'s brand of sustained release capsules.
Patent Applied For.
1. GP 9(6):66 (June) 1954.

Smith, Kline & French Laboratories, Philadelphia





for the continuous and sustained mood-ameliorating effect of 'Dexamyl' over a prolonged period of time

Dexamyl*

Dexedrine plus amobarbital

Spansule*

Brand of sustained release capsules

In 2 dosage strengths:

No. 1 (1 dot on capsule)—'Dexedrine' Sulfate (dextroamphetamine sulfate, S.K.F.), 10 mg.; amobarbital, 1 gr.

No. 2 (2 dots on capsule)—'Dexedrine' Sulfate (dextroamphetamine sulfate, S.K.F.), 15 mg.; amobarbital, 1½ gr.

Both dosage strengths have the same *duration of effect*; they differ only in *intensity of effect*.

*T.M. Reg. U.S. Pat. Off.

†T.M. Reg. U.S. Pat. Off. for dextro-amphetamine sulfate, S.K.F.

Patent Applied For.



for day-long control of appetite
in weight reduction

Dexedrine*

dextro-amphetamine sulfate, S.K.F.

Spansule*

brand of sustained release capsules

In 2 dosage strengths:

10 mg. (1 dot on capsule) and 15 mg. (2 dots on capsule)

Both dosage strengths have the same *duration of effect*;
they differ only in *intensity of effect*.

ALSO AVAILABLE: Benzedriner Sulfate Spansule capsules,
15 mg.—for day-long relief of psychogenic tiredness

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Patent Applied For.

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*the modern presentation
of phenobarbital*

Eskabar*
phenobarbital, S.K.F.

Spansule*
brand of sustained release capsules

for continuous, even sedation throughout the day
or night with a single oral dose

In 2 dosage strengths:
1 gr. (1 dot on capsule) and
1½ gr. (2 dots on capsule)

Both dosage strengths have the same *duration* of effect;
they differ only in *intensity* of effect.

*T.M. Reg. U.S. Pat. Off.
Patent Applied For.



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for sustained, uninterrupted anticholinergic activity
in PEPTIC ULCER, HYPERSECRETION AND
SPASTIC CONDITIONS OF THE G. I. TRACT

Prydon*

belladonna alkaloids

Spansule†

brand of sustained release capsules

anticholinergic (antisecretory and antispasmodic)

In 2 dosage strengths:

0.4 mg. (1 dot on capsule) and

0.8 mg. (2 dots on capsule) selected belladonna alkaloids

Both dosage strengths have the same *duration* of effect;
they differ only in *intensity* of effect.



Prydonnal*

belladonna alkaloids plus phenobarbital

Spansule†

brand of sustained release capsules

anticholinergic (antisecretory and
antispasmodic) plus sedative

0.4 mg. belladonna alkaloids plus 1 gr. phenobarbital



*Trademark

†T.M. Reg. U.S. Pat. Off.

Patent Applied For.

*for continuous and sustained
antihistamine effect*

Teldrin*

chlorprophénpyridamine maleate

Spansule*

brand of sustained release capsules

In 2 dosage strengths:

8 mg. (1 dot on capsule) especially
for younger children and
12 mg. (2 dots on capsule) for adults

Both dosage strengths have the same *duration of effect*;
they differ only in *intensity of effect*.

*T.M. Reg. U.S. Pat. Off.
Patent Applied For.



Smith, Kline & French Laboratories, Philadelphia
the originators of sustained release oral medication

FORENSIC MEDICINE

Occupational Diseases—Scope

PROBLEM: A linotype operator contracted dermatitis from volatilized fumes from molten metal. The fumes had never affected other employees at the plant, medical books disclosed but few similar cases, and testifying specialists had not treated any persons with the sensitivity. Was the resulting disability compensable as an occupational disease?

COURT'S ANSWER: Yes.

The Connecticut Supreme Court of Errors said that an occupational disease need not be a common lesion and compensation should not be denied merely because the employee was unusually susceptible to the fumes (128 Conn. 499, 24 Atl. 2d 253).

Damages—Medical Testimony

PROBLEM: A woman sustained a deep cut on her forehead when she fell from a balcony to the ground and was hospitalized. Could she collect damages without medical testimony as to the extent of her injuries?

COURT'S ANSWER: Yes.

The Louisiana Court of Appeals, New Orleans, said that a person suing for damages for personal injury need not call a medical expert even if one is readily available, if the nature of the injuries can be otherwise proved. In this case, a certified hospital chart was sufficient proof regarding extent of injury, since contradicting evidence was not offered (75 So. 2d 34).

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during pregnancy**
gentia-jel is specific — 93%
clinically effective
gentia-jel is safe — safe for self-
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gentia-jel is esthetic — packaged in
unique single-dose disposable
applicators . . . packages of 12

the only
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violet jelly
you can prescribe

GA-2
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for fast relief

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U. S. Pat. 2,678,609 Canadian Pat. 503,585-1954

Each cc. contains:
Physostigmine salicylate,
0.6 mg., and l-hyoscymine
hydrobromide, 0.3 mg.

SUPPLIED: 1-cc. ampuls,
boxes of 25; 10- and 30-cc.
multiple dose vials. See
package circular for
dosage.

**IN CRIPPLING MUSCLE
SPASM... as in arthritis, bursitis,
myositis, low-back pain, sprains and strains**

inject-oral therapy

then... for
sustained comfort
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SALIMEPH-C tablets

TRADEMARK

Each tablet contains:
Salicylamide, 250 mg.;
mephenesin, 250 mg.;
and ascorbic acid, 15 mg.

DOSAGE: 2 or 3 tablets q.i.d.

SUPPLIED: Bottles of 100, 500,
and 1000 tablets.

Ethical Pharmaceuticals Since 1894
KREMERS-URBAN COMPANY
Laboratories in Milwaukee

Compensation—Accident

PROBLEM: A mechanic's thumb was blistered by the rough surface of a tool he was using, and infection led to amputation. Was the disability compensable as having been caused by an accident?

COURT'S ANSWER: Yes.

So decided the Pennsylvania Superior Court (83 Atl. 2d 414).

Examinations—Appointments

PROBLEM: Defendant in a personal injury suit asked the trial judge to appoint Dr. X to examine plaintiff. The plaintiff objected, saying that the doctor was a professional insurance company doctor who was selected because he made a good witness for the defense. Did the judge wrongfully appoint Dr. X?

COURT'S ANSWER: No.

The Ohio Supreme Court said that, if the judge believed that Dr. X was a proper person to make the examination, the appointment was not improper merely because defendant suggested the doctor (123 Ohio St. 383, 175 N.E. 611).



"I don't think you quite get the idea of a light diet."

Upjohn

preoperative bowel preparation within 24 hours:

Mycifradin *tablets*

Trademark for the Upjohn brand of neomycin

Each tablet contains 0.5 Gm. neomycin sulfate (equivalent to 0.35 Gm. neomycin base). In bottles of 20 tablets.

Also available:

Mycifradin Sulfate Powder (topical) in vials of 0.5 Gm. and 5 Gm.

Mycifradin Sulfate (intramuscular) in vials of 0.5 Gm.

THE UPJOHN COMPANY, KALAMAZOO, MICHIGAN



FORENSIC MEDICINE

Malpractice—Right to Sue

PROBLEM: Could an injured employee who had accepted medical services furnished by the employer's physician and an award of workmen's compensation sue the doctor for malpractice?

COURT'S ANSWER: Yes.

The Georgia Court of Appeals said that the wording of the workmen's compensation law permitted suit against the physician even if the workmen's compensation award partly covered the injury caused by the malpractice.

The court noted that the appellate courts of Michigan, Oregon, North Dakota, and West Virginia have decided that the state laws do not allow suits against the doctor in such instances but that the

Georgia court's decision is in line with judgments in Missouri, Indiana, Idaho, California, Minnesota, Texas, Tennessee, Illinois, Colorado, and Utah (84 S.E. 2d 847).

Negligent Diagnosis—X-Rays

PROBLEM: A doctor made a roentgenogram of an injured pelvis and hip-joint socket. The film had been destroyed, but there was evidence that if it had been carefully taken and examined, the doctor would have discovered fractures revealed by subsequent examination. Was the doctor liable for resulting crippled condition of patient?

COURT'S ANSWER: Yes.

So decided the Indiana Supreme Court (15 N.E. 2d 365).

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NULACIN

A pleasant-tasting tablet...to be dissolved slowly in the mouth...not to be chewed or swallowed...made from milk combined with dextrins and maltose and four balanced non-systemic antacids...**

Promptly stops ulcer pain...holds it in abeyance...hastens ulcer healing.

In tubes of 25 at all pharmacies. Physicians are invited to send for reprints and clinical test samples.

*Steigmann, F., and Goldberg, E., J. Lab. & Clin. Med. 42:955 (1953).

**Mg trisilicate, 3.5 gr.; Ca carbonate, 2.0 gr.; Mg oxide, 2.0 gr.; Mg carbonate, 0.5 gr.



Continuous gastric
anacidity for
prompt relief
In peptic ulcer,
gastritis,
hyperacidity,
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heartburn.

to reduce obstetric risks



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phosphorus

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Walker 100 CAPSULES

PRECALCIN

A DIETARY
SUPPLEMENT
LACTATE

FOR USE DURING PREGNANCY AND LACTATION

EACH CAPSULE CONTAINS:

CALCIUM LACTATE	450.00 mg
vitamin A, Crystalline	2,000 U.S.P. units
Thiamine B6	400 U.S.P. units
Riboflavin	2.00 mg
Niacin	20.00 mg
Ascorbic Acid	30.00 mg
CALCIUM PANTOTHENATE	2.00 mg
Pyridoxine HCl	1.00 mg
Folic Acid	0.50 mg
Dihydroxyacetone	1.00 mg
various trace elements	100.00 mg

INACTIVE INGREDIENTS:

Copper (as Copper Sulfate) 2 mg, Manganese (as Manganese Sulfate) 2 mg, Cobalt (as Cobalt Sulfate) 0.04 mg, Zinc (as Zinc Oxide) 2 mg, Magnesium (as Magnesium Sulfate) 2 mg, Molybdenum (as Sodium Molybdate) 0.04 mg, Iodine (as Potassium Iodide) 0.02 mg, and Fluorine 0.02 mg contained in Bone Phosphate 20 mg.

DOSE: 1 capsule three times daily, or as prescribed.
(SEE REAR PANEL)

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the physician decides

without
phosphorus

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(RESERPINE, LILLY)



sustained relief in labile hypertension

A pure, crystalline
alkaloid of *Rauwolfia*

In essential hypertension, 'Sandril' (Reserpine, Lilly) offers sustained, gradual reduction of blood pressure as well as mental relaxation and alleviation of apprehension. In more severe, fixed hypertension, when therapy with 'Provell Maleate' (Protoveratrine A and B Maleates, Lilly) is indicated, 'Sandril' serves as an ideal adjunct.

Emotion-calming 'Sandril' is also beneficial in anxiety states and nervousness often associated with old age and the menopause.

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In the menopausal patient, 'Sandril' has an all-important calming effect; may enhance estrogen therapy.

Emotional problems and nervousness associated with old age are benefited by the quieting effect of 'Sandril.'



a new topical therapy with 25 times the anti-inflammatory, antipruritic potency of hydrocortisone¹

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(Squibb Hydrocortisone Acetate Ointment and Lotion)

acetate

Ointment Lotion



Condition after one week of therapy using Florinef Ointment on the right arm and hydrocortisone ointment on the left arm.

RESULTS OF TREATMENT WITH FLORINEF²

Diagnosis	Number of patients	Definite benefit	No change
Severe sunburn	3	3	
Atopic dermatitis	10	10	
Contact dermatitis	7	6	
Intertrigo	4	4	
Pruritus vulvae	6	6	
Pruritus ani	4	3	1
	34	31	3

%

Florinef Ointment, 0.1 and 0.2 per cent, is supplied in 5 gram and 20 gram collapsible tubes.

Florinef Lotion, 0.1 and 0.2 per cent, is available in 15 cc. plastic squeeze bottles.

1. Sternberg, T., Graham, J., and Newcomer, V. D.: Personal communication.
2. Robinson, R. C. V.: In press (J.A.M.A.)

SQUIBB

A NAME YOU CAN TRUST

"FLORINEF" IS A SQUIBB TRADEMARK

NEW! 'Tetrazets'

BACITRACIN-TYROTHRICIN-NEOMYCIN-BENZOCAINE TROCHES

broader attack to overcome minor throat irritations

MAJOR ADVANTAGES: Combines 3 antibiotics to fight both gram-positive and gram-negative bacteria. Benzocaine included for soothing effect. Little danger of sensitization.



'TETRAZETS' quickly relieve minor mouth and throat irritations

It's new—a single troche containing 3 potent antibiotics (bacitracin, tyrothricin, neomycin) to combat afebrile oral infections.

'TETRAZETS' offer you the ideal topical treatment of minor irritations of the oral cavity.

In deep-seated infections, such as Vincent's infection, tonsillitis and streptococcus sore throat, 'TETRAZETS' may be used as an adjuvant to parenteral antibiotics.

Before and after tonsillectomies, 'TETRAZETS' help combat secondary invaders.

Supplied: In vials of 12. Each 'TETRAZET' troche contains 50 units of zinc bacitracin, 1 mg. tyrothricin, 5 mg. neomycin sulfate with 5 mg. benzocaine.



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Whenever
the diet is faulty,
the appetite poor,
or the loss of food
is excessive
through vomiting
or diarrhea—

Valentine's MEAT EXTRACT

stimulates the appetite,
increases the flow of
digestive juices,
provides supplementary
amounts of vitamins, minerals
and soluble proteins,
extra-dietary vitamin B₁₂,
protective quantities of
potassium, in a palatable and
readily assimilated form.

Supplied in bottles of 2 or 6 fluidounces.

Dosage is 1 teaspoonful two or three times daily;
two or three times this amount for potassium
therapy.

VALENTINE Company, Inc.
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Questions & Answers

All questions received will be answered by letter directed to the petitioner; questions chosen for publication will appear with the physician's name deleted. Address all inquiries to the Editorial Department, MODERN MEDICINE, 84 South Tenth Street, Minneapolis 3, Minnesota.

Fingernail Splitting

QUESTION: Is splitting of fingernails caused by nail polish? If so, what form of treatment is recommended?
M.D., Maryland

ANSWER: By Consultant in Dermatology. Many more women than men have longitudinal splitting of the nails. This was true long before the common use of nail polish. Calcium deficiency was formerly thought to be an important causative factor, but present concepts give little support to this theory. Occasionally, some disturbance of iron metabolism is the basic cause. Endocrine imbalance may produce nail splitting since the condition is seen more often in women in their 40's. Certainly one of the most obvious causes is the use of soaps and detergents in ordinary housework.

The most effective therapy is soaking the nails in warm olive oil for ten or fifteen minutes once daily. Despite the suspicion that nail polish causes or aggravates the condition in some individuals, lacquer may be used as a protective coating against solvents and detergents. The management of each case differs.

migraine...

CAFERGOT

®
Ergotamine tartrate

1 mg.

with caffeine 100 mg.

*Average Dosage: 2 to 6 tablets
at onset of the attack*


Sandoz
PHARMACEUTICALS
HANOVER, N. J.

QUESTIONS & ANSWERS

Hyperinsulinism

QUESTION: A 24-year-old single woman has had the following symptoms for the past year: frequent hunger; weakness of the extremities, especially for a week after menstruation; and a scanty menstrual cycle of thirty to thirty-five days. Physical examination and urinalysis are negative; red blood count, hemoglobin, and white blood count are normal; cholesterol 170; cholesterol esters normal; blood sugar 75. Sugar tolerance showed low sugar at all times. She has gained about 3 lb. during the past year. What condition do these symptoms suggest?

M.D., New York

ANSWER: By *Consultant in Internal Medicine*. The symptoms and laboratory data suggest hyperinsulinism. Hyperinsulinism may be the

result of tumors of the islands of Langerhans, extensive hyperplasia of the pancreas, undernutrition, excessive exercise, neurogenic hypoglycemia, hypothyroidism, Addison's disease, hypopituitarism, and certain diseases in which liver tissue has been extensively removed. Sometimes diagnosis can be established only by surgical exploration.

Surgery should be done for neoplasms, which are usually malignant. Subtotal pancreatectomy is advised when tumors are not found. If the entire pancreas is removed, slight to moderate diabetes develops.

Medical treatment is usually unsatisfactory, but high-protein or high-fat diets may be beneficial. Epinephrine, 0.5 to 1 cc., or pitui-

IN ANXIETY AND TENSION

**Sedation
without
hypnosis**

IN HYPERTENSION

**a safer
tranquillizer and
antihypertensive**

QUESTIONS & ANSWERS

tary extracts given subcutaneously may be of value and should be given daily. Epinephrine may be combined with oil.

In the case described, the menstrual symptoms suggest hypopituitarism. Pituitary extract may be given but is an insulin antagonist.

The patient may have vagotonia. In this condition, fatigue is especially evident in midafternoon and blood sugar is usually low at that time, but not as depressed as from insulin reactions. The lowest blood sugars occur two to three hours after eating and the administration of food, especially carbohydrates, rapidly alleviates the disorder. For visceroptosis, an abdominal support may be of some value.

Cardiac Failure

QUESTION: Is cardiac failure in young rheumatic patients due to active rheumatic infection?

M.D., New York

ANSWER: By *Consultant in Cardiology*. Cardiac failure in young rheumatic patients is not always caused by active rheumatic infection. Frequently, cardiac failure is secondary to active rheumatic infection. However, when a heart has been previously damaged by rheumatic infection, cardiac failure may arise from a serious infection that produces strain on the heart such as pneumonia or from excessive exercise. Other factors may also be responsible for the condition, and investigation should be thorough.

FOR MAINTENANCE THERAPY

**Rx as little as
0.1 mg. per day**

Serpasil

Dosage CIBA

a pure crystalline alkaloid of rauwolfa root first identified, purified and introduced by CIBA

C I B A SUMMIT, N. J.



Smooth-Working Combination

TO HELP CORRECT CONSTIPATION

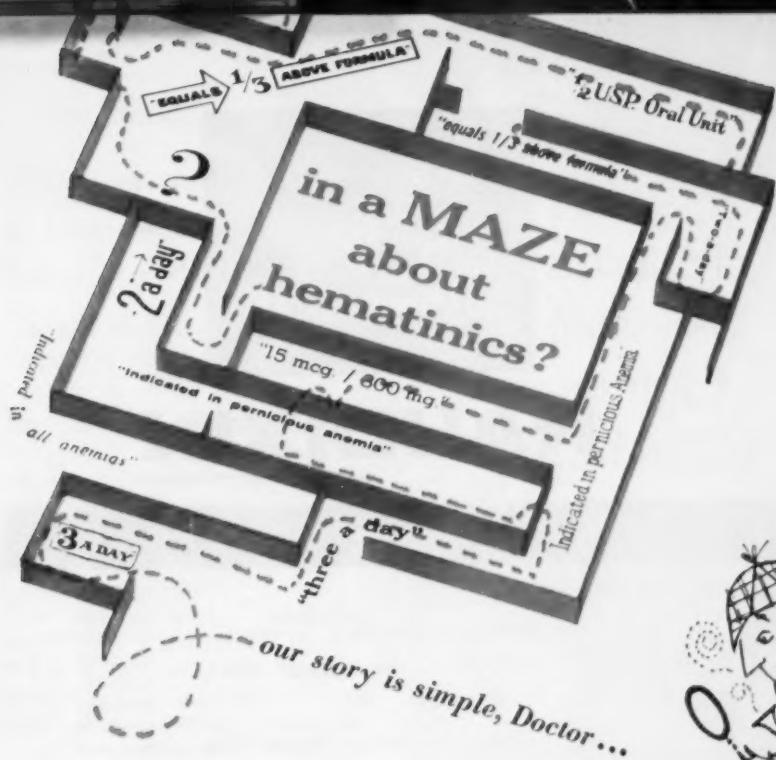
Antacid • Laxative • Lubricant

Magnesium Hydroxide plus pure mineral oil make Haley's M-O a smooth working antacid-laxative-lubricant that efficaciously relieves constipation and the attendant gastric hyperacidity.

The oil globules in Haley's M-O are minutely subdivided to assure uniform distribution and thorough mixture with intestinal contents. Oil leakage is avoided and a comfortable evacuation is effected through stimulation of normal intestinal rhythm and blunted defecation reflex.



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ONE CAPSULE DAILY

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(one daily dose) contains:

Intrinsic Factor-Vitamin B ₁₂ Concentrate	1 U.S.P. Oral Unit
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Ferrous Sulfate, Exsiccated	400 mg.
Ascorbic Acid	100 mg.
Molybdenum	1.5 mg.
Cobalt	0.5 mg.
Copper	0.5 mg.
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Zinc	0.5 mg.

Bottles of 30 and 100
Prescription only

Only one-a-day hematinic which
conforms to exact U.S.P.
requirements for Intrinsic Factor-B₁₂,
as defined by the Anti-Anemia
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Only one-a-day hematinic which
contains therapeutic amounts of all
known hematopoietic factors, including
the "four extra essentials."

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CHICAGO 11, ILLINOIS

whole root
therapy of
hypertension

RAUDIXIN

SQUIBB RAUWOLFIA

RAUDIXIN CONTAINS ALL THE ALKALOIDS OF THE WHOLE ROOT:

Reserpine accounts for practically all of the *sedative effect* of rauwolfia.

Reserpine does not account for all of the *hypotensive effect* of rauwolfia. Other alkaloids, which are not sedative in action, contribute to the hypotensive effect of rauwolfia.

Raudixin is preferred in hypertension because it supplies the total activity of the whole root and does not cause excessive sedation.

50 and 100 mg. tablets,
bottles of 100 and 1000.
Initial dose: 100 mg. b.i.d.

Ajmaline
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(Delta-Yohimbine)
Isoajmaline
Ajmalinine
Neoajmaline
Isorauhimbine
Rauhimbine
Rauwolfinine
Reserpine
Reserpinine
Sarpagine (Raupine)
Serpentine
Serpentinine
Yohimbine
Rescinnamine
Reserpiline
Other unidentified alkaloids

RAUDIXIN IS A SQUIBB TRADEMARK



Diagnosis and Therapy of Untoward Reactions Caused by Manganese

RABEAL PEÑALVER, M.D.

Havana, Cuba

*Since, at the present time, no effective therapy for manganese poisoning exists, preventive measures are extremely important.**

THE principal uses of manganese are in the manufacture of alloy and steel, dry cells, and chemicals. Most of the ore is mined in Russia, India, South Africa, Brazil, and Cuba, but recent methods of processing will increase the use of United States and Canadian products.

The most important route of entrance of the metal is through the respiratory tract. Miners, especially those using pneumatic drills, are particularly susceptible. After reaching the blood stream, manganese has a predilection for some nerve cells at the base of the brain and upper spinal cord. The metal is also found in high concentration in lungs, kidneys, liver, intestines, heart, bones, brain, and stomach. Most of the excretion is by the feces, through the bile. Due to individual sensitivity, duration of exposure varies between six months and two years.

Manganism produces primarily psychologic manifestations and neu-

*Manganese poisoning. Indust. Med. 24:1-7, 1955.

relieve
pain,
headache,
fever
promptly
and safely

APAMIDE®

(N-acetyl-p-aminophenol, Ames)

direct-acting

analgesic-antipyretic...

no toxic by-products...

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antipyretic...speeds relief

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5554



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Elkhart, Indiana

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This well-known formula will never conflict or cause incompatibilities with any medication for other specific disorders you may have occasion to prescribe.

GENERAL FREE SUPPLY

May we send you a generous supply of Pertussin for your own medicine chest with enough for a few favorite patients?

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New York 13, N. Y.

rologic disorders. The first indications of the intoxication are usually of subjective character, including cephalgia, asthenia, hypersomnia, leg spasms, arthralgia, irritability, and weakness of the legs. Psychomotor irritability leads patients to impulsive acts, such as compulsions to work or walk. Euphoria, absent-mindedness, mental confusion, aggressiveness, hallucinations, and intense psychic impulses may occur.

Polymorphism of neurologic disturbances is characteristic. Symptoms and syndromes seem to be similar to other extrapyramidal syndromes such as paralysis agitans and progressive lenticular degeneration. Included are:

- *Cephalgia* of variable intensity, location, and duration due to diffuse brain irritation with slight edema
- *Sleep disruptions*, such as hypersomnia, insomnia, or restlessness
- *Sensitive muscles*, possibly due to peripheral toxic process
- *Gait disturbances*, such as difficulty in stopping forward walking, loss of the gravity center when walking backwards and subsequent falling, and spastic, incoordinated movements

(Continued on page 54)

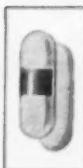


"It seems mighty strange that there aren't any for me!"



*to
combat
resistant
bacteria ...*

Chloromycetin.



The rising incidence of bacterial resistance to various antibiotics constitutes a serious therapeutic problem. Many infections, once readily controlled, are now proving difficult to combat. Administration of **CHLOROMYCETIN** (chloramphenicol, Parke-Davis) is often useful in these cases because this notable, broad-spectrum antibiotic is frequently effective where other antibiotics fail.

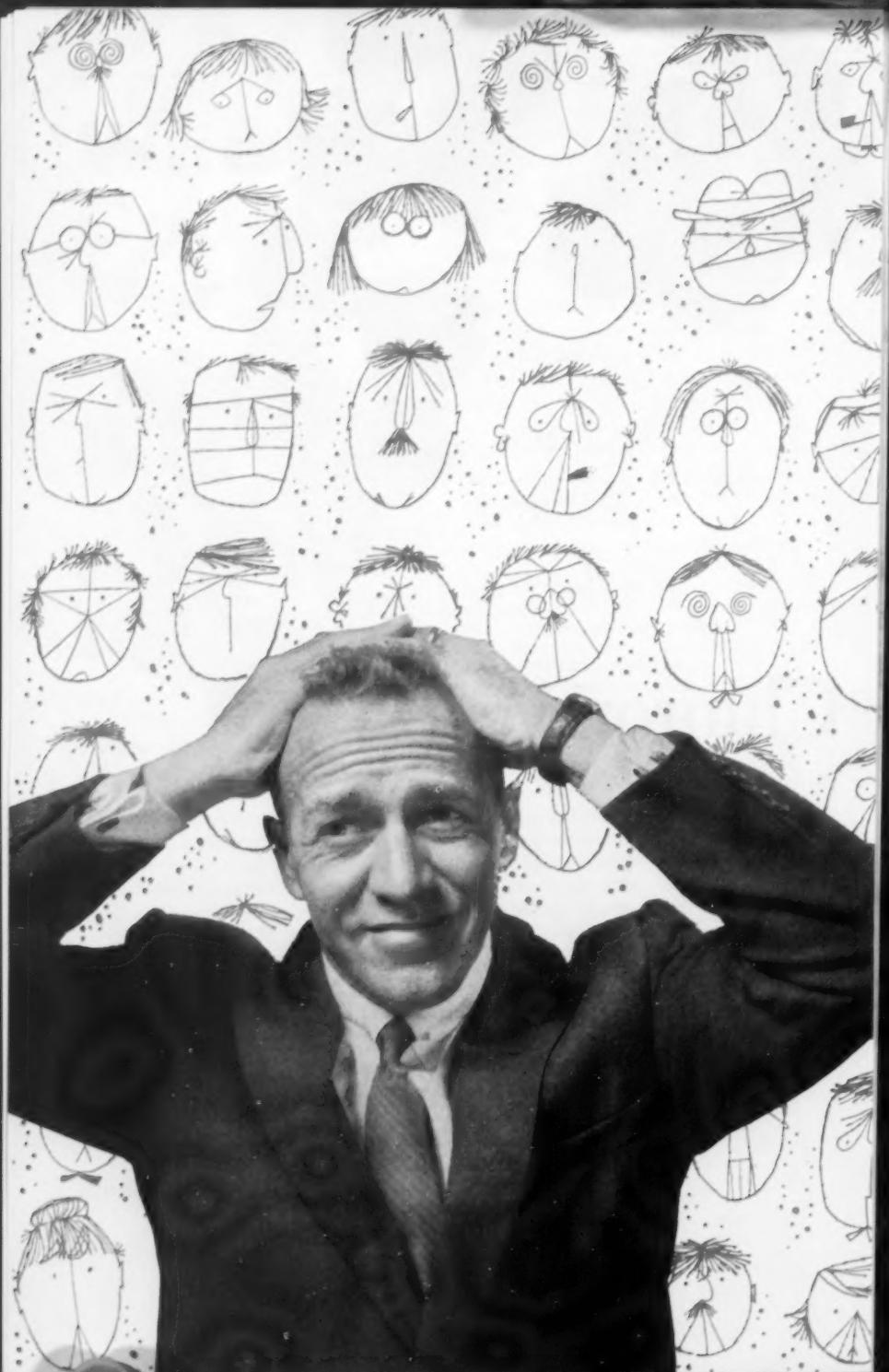
"...An advantage of **CHLOROMYCETIN** appears to be its relatively low tendency to induce sensitization in the host or resistance among potential pathogens under clinical conditions."*

CHLOROMYCETIN is a potent therapeutic agent and, because certain blood dyscrasias have been associated with its administration, it should not be used indiscriminately or for minor infections. Furthermore, as with certain other drugs, adequate blood studies should be made when the patient requires prolonged or intermittent therapy.

*Pratt, R., & Dufrenoy, J.: Texas Rep. Biol. & Med. 12:145, 1954.

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for seborrheic dermatitis patients

SELSUN®

. . . brings quick, sure relief

Just two or three SELSUN applications relieve itching, burning scalps. Four or five more completely clear scaling. Then each SELSUN application keeps the scalp free of scales *for one to four weeks*. And SELSUN completely controls 81-87% of all seborrheic dermatitis cases, 92-95% of dandruff cases.

. . . with no daily care or ointments

Your patients will find SELSUN remarkably easy to use. It is applied and rinsed out while washing the hair. Takes only about five minutes—no messy ointments or overnight applications. Leaves both hair and scalp clean. In 4-fluid-ounce bottles, on prescription only. *Abbott*

503092

*SELSUN Sulfide Suspension / Selenium Sulfide, Abbott

- **Vocal disorders**, including monotonous voice and inability to speak above a whisper; pauses between words disappear
- **Tremors** frequently observed in tongue, arms, and legs which are increased during movement
- **Facies** often described as masklike, wooden, or immovable; laughter may be uncontrollable
- **Handwriting** tends to be irregular, small, and without spacing between words.

Other neurologic findings usually include slightly exaggerated deep tendon reflexes, clonus, and Babinski reflex. No disturbance in cutaneous sensation occurs, and the Romberg sign is negative.

Impotency, twitchings of fingers, liver and kidney disorders, and dermatitis may also occur.

Laboratory findings are not diagnostic. A prolonged exposure to manganese oxide dust causes increased hemoglobin and erythrocyte counts and decreased monocyte values. Urinalysis is normal, and cerebrospinal fluid occasionally contains traces of globulin. Roentgenograms show no alterations in long bones or in the lungs. The Takata-Ara test of liver function is positive.

Prognosis is indefinite. With neurologic disturbances, the disease is generally progressive, even though the patient is no longer exposed to the metal. Some individuals become completely paralyzed, others partially recover. Lesions of the nervous system are irreversible.

(Continued on page 58)

For the Aged and Senile Patient



Metrazol tablets, $1\frac{1}{2}$ grs. (100 mg.) each. Metrazol Liquidum, a wine-like flavored 15 per cent alcoholic elixir containing 100 mg. Metrazol and 1 mg. thiamine HCl per teaspoonful.

Metrazol®, brand of pentylenetetrazol, a product of E. Bilhuber, Inc.

ORAL *Metrazol*

— to help the geriatric patient with early or advanced signs of mental confusion attain a more optimistic outlook on life, to be more cooperative and alert, often with improvement in appetite and sleep pattern. Metrazol, a centrally acting stimulant, increases respiratory and circulatory efficiency without over-excitation or hypertensive effect.

Dose: $1\frac{1}{2}$ to 3 grains, 1 or 2 teaspoonfuls Liquidum, or the tablets, every three or four hours.

BILHUBER-KNOLL CORP. distributor

ORANGE
NEW JERSEY

"an effective antirheumatic agent"*

nonhormonal anti-arthritic

BUTAZOLIDIN®

(brand of phenylbutazone)

relieves pain • improves function • resolves inflammation

The standing of BUTAZOLIDIN among today's anti-arthritis is attested by more than 250 published reports. From this combined experience it is evident that BUTAZOLIDIN has achieved recognition as a potent agent capable of producing clinical results that compare favorably with those of the hormones.

Indications: Gouty Arthritis Rheumatoid Arthritis Psoriatic Arthritis

 Rheumatoid Spondylitis Painful Shoulder Syndrome

BUTAZOLIDIN® (brand of phenylbutazone) red coated tablets of 100 mg.

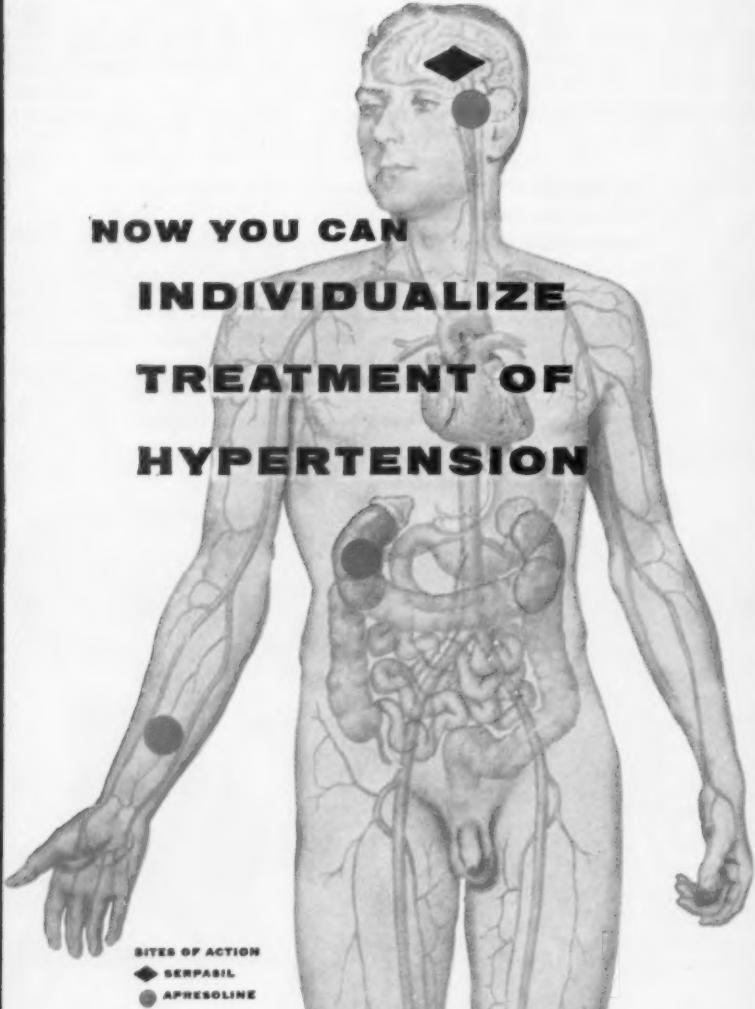
*Bunim, J. J.: Research Activities in Rheumatic Diseases, Pub. Health Rep. 69:437, 1954.



GEIGY PHARMACEUTICALS

Division of Geigy Chemical Corporation, 230 Church Street, New York 13, N.Y.

40000



**NOW YOU CAN
INDIVIDUALIZE
TREATMENT OF
HYPERTENSION**

BITES OF ACTION

- ◆ SERPASIL
- APRESOLINE

SERPASIL® (reserpine CIBA)

SERPASIL®-APRESOLINE® (reserpine and hydralazine hydrochloride CIBA)

APRESOLINE® hydrochloride (hydralazine hydrochloride CIBA)

For initial therapy—in all cases:

SERPASIL, a pure crystalline alkaloid of rauwolfia root—particularly effective in the neurogenic forms of hypertension. Acts centrally—tranquillizes, moderately lowers blood pressure, slows heart rate.

Serpasil®

When combination therapy is indicated:

SERPASIL-APRESOLINE, a combination product offering convenience and economy in the more complicated cases involving both neurogenic and humoral factors.

Serpasil®-Apresoline®

In more refractory cases requiring further individualization of dosage:

APRESOLINE acts centrally and peripherally for a marked antihypertensive effect. Increases renal plasma flow—produces vaso-dilatation—inhibits pressor substances.

Apresoline®

Serpasil Tablets, 0.1 mg., 0.25 mg. and 1.0 mg.
Parenteral Solution (for neuropsychiatric use only),
2.5 mg. per ml. in 2-ml. ampuls.
Elixir, 0.2 mg. per 4-ml. teaspoonful.

Serpasil-Apresoline Tablets, each containing 0.1 mg. of Serpasil and 25 mg. of Apresoline.
Tablets, each containing 0.2 mg. of Serpasil and 50 mg. of Apresoline.

Apresoline Tablets, 10 mg., 25 mg., 50 mg. and 100 mg.
Ampuls, 1 ml., 25 mg. per ml.

C I B A
SUMMIT, N. J.

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Convenient! Complete!

**TUBE-FEEDING
FORMULA**

**supplies essential
nutrients for 24 hours!**

MIX:

1 qt. whole milk
3 cups (405 Gm.)
non-fat milk powder
4 heaping tbsps. (60 Gm.)
GEVRAL PROTEIN

Water to make 2,000 cc.

SUPPLIES:

Liquid	2,000 cc.
Protein	217 Gm.
Fat	42 Gm.
Carbohydrate	273 Gm.
Calories	2,354

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GEVRAL* PROTEIN

Geriatric Vitamin-Mineral-Protein Supplement *Lederle*

LEDERLE LABORATORIES DIVISION
AMERICAN CYANAMID COMPANY Pearl River, New York

*REG. U.S. PAT. OFF.

With psychologic disorders, an initial mistaken diagnosis may be drug addiction. Recovery usually is rapid if exposure is discontinued. In many cases, psychologic disorders disappear in three or four months with no other disturbances. In some instances, however, neurologic symptoms may subsequently develop. Manganism is not fatal and does not shorten life.

At the present time, no effective therapy is available. Vitamin B, antiparkinsonism drugs, antispasmodics, calcium, liver extract, amino acids, and BAL have been tried without good results. Therefore, preventive measures should be emphasized. All dust exposures should be controlled, not allowing a concentration higher than 6 mg. of manganese per cubic meter of air. Ventilation, wet processes, quarterly medical examinations, personal hygiene such as bathing after work, frequent change of work clothes, long periods of rest after evident exposure, and proper diet are important factors.



"He has the mentality of the average 20-year-old and, as you know, the average 20-year-old has the mentality of a boy two years younger than your son."

S

tat therapy

I

or infection

and

stress...

...with a single prescription

THE AVAILABILITY of such anti-infectives as Terramycin, Tetracyn and penicillin has not altered the wise admonition to "treat the patient as well as the disease." The National Research Council¹ has emphasized that certain water-soluble vitamins (B-complex and C) and vitamin K are involved in body defense mechanisms as well as in tissue repair and are required in increased amounts during the stress of febrile infections. Yet there is often a considerable reduction in the normal supply of these important nutritional elements in acutely ill patients who are candidates for antibiotic therapy.

Unique new Stress Fortified Terramycin-SF, Tetracyn-SF and Pen-SF are formulated in accordance with National Research Council recommendations¹ for vitamin supplementation in sickness or injury, as a significant contribution to rapid recovery and convalescence. The patient is assured the maximum benefits of modern antibiotic therapy plus the needed vitamin support — without additional prescriptions, and at little additional cost.

1. Pollack, H., and Halpern, S. L.: Therapeutic Nutrition. Prepared with Collaboration of the Committee on Therapeutic Nutrition, Food and Nutrition Board, National Research Council. Baltimore, Waverly Press, 1952.

of **S**tress
Fortified

Terramycin-SF

BRAND OF ANTIBIOTIC WITH TERRAMYCIN

Tetracyn-SF

BRAND OF TETRACYCLINE WITH TETRACYCIN

Pen-SF

BRAND OF PENICILLIN WITH PENICILLIN

TRADE MARK

*at little
additional cost to the patient*

Stat therapy for infection and

Terramycin

BRAND OF BREVETOMYCIN WITH VITAMIN

Tetracyn

BRAND OF TETRACYCLINE WITH VITAMIN

Pen

BRAND OF PENICILLIN & POTASSIUM
WITH VITAMINS

*The usual daily dose of 1 Gm. of
either broad-spectrum antibiotic
or 600,000 units of Pen-SF supplies
the equivalent of one Stress Formula
capsule as recommended by the
National Research Council, at little
additional cost to the patient.*

stress with STRESS FORTIFIED



CAPSULES 250 mg.

ORAL SUSPENSION (fruit flavored)
250 mg. per 5 cc. teaspoonful



CAPSULES 250 mg.

ORAL SUSPENSION (fruit flavored)
125 mg. per 5 cc. teaspoonful



CAPSULES

*TRADE MARK

Each 250 mg. Capsule of these broad-spectrum antibiotics of choice and each 250 mg. dose of the flavorful Oral Suspensions supplies in addition to the antibiotic:

Ascorbic acid, U.S.P.	75 mg.
Thiamine mononitrate	2.5 mg.
Riboflavin	2.5 mg.
Niacinamide	25 mg.
Pyridoxine hydrochloride	0.5 mg.
Calcium pantothenate	5 mg.
Vitamin B ₁₂ activity	1 mcg.
Folic acid	0.375 mg.
Menadione (vitamin K analog)	0.5 mg.

Each Capsule contains 200,000 units of crystalline potassium penicillin G plus:

Ascorbic acid, U.S.P.	100 mg.
Thiamine mononitrate	3.33 mg.
Riboflavin	3.33 mg.
Niacinamide	33.33 mg.
Pyridoxine hydrochloride	0.66 mg.
Calcium pantothenate	6.66 mg.
Vitamin B ₁₂ activity	1.33 mcg.
Folic acid	0.50 mg.
Menadione (vitamin K analog)	0.66 mg.



PFIZER LABORATORIES, Brooklyn 6, N.Y.

DIVISION CHAS. PFIZER & CO., INC.

MEDICAL NOTES FROM ABROAD

AUSTRIA

Exchange Transfusions

An immediate exchange transfusion may be lifesaving in adults when sudden renal shutdown, acute blood poisoning, or severe hemolytic transfusion reactions occur. The procedure may also be of value when toxic manifestations result from extensive burns.

Dr. H. Reissigl of the University of Innsbruck employs fresh blood with a low agglutinin titer. By using several veins simultaneously, the transfusion can be completed in two or three hours without embarrassing the general circulation. To decrease the total amount of blood necessary, as much blood as is safely tolerated is withdrawn before starting exchange.

Wien. klin. Wchnschr. (Vienna) 66:705-707, 1954.

X-Ray for Breast Cancer

Pre- and postoperative x-ray therapy of carcinoma of the breast is apparently of value in controlling metastases, reports Dr. E. Domanig of Salzburg.

The possibility of mechanical dissemination of cancer cells during the surgical procedure is also decreased when therapy is given both before and after operation. Preop-

erative irradiation is most effective in limiting lymphatic spread. Radiation therapy after surgery is valuable as a palliative procedure when cancer has already spread to regional lymph nodes and surrounding soft tissues.

The three-year survival rate among 246 patients treated by both x-ray and surgery was over 65%; the five-year survival rate was about 50%.

Krebsarzt (Vienna) 9:260-262, 1954.

Postoperative Osteitis Pubis

Inflammation of the pubic bone may occur after operations in the inguinal region and lower abdomen. The condition is most frequently seen after urologic surgery.

Dr. Alfred Ravelli of the University of Innsbruck observes that the clinical symptoms of osteitis do not appear until several weeks after the operation. Pain starts in the pubic region and spreads gradually to the anteromedial aspects of the thighs, the testicles, and the gluteal region. Intense pain and muscle spasm frequently confine the patient to bed.

Signs of disease are few; tenderness on pressure to the pubic arch and some edema are the most frequent findings. Pronounced local redness and swelling and enlarge-

for appetite and growth

OREXIN (STUART)

combines the 3 vitamins important for appetite and growth.

**UNIQUE
COMBINATION**

ONE TABLET CONTAINS:

B₁₂.....25 meg.
B₆.....5 mg.
B₁.....10 mg.

DOSE: 1 tablet daily

**UNIQUE
FORM**

Pleasant tasting, specially constructed soft tablet (Softab[†]) melts in the mouth.

If liquid is preferred OREXIN tablet dissolves quickly in teaspoon of water.

Available at all pharmacies
in bottles of 30 and 100 tablets

THE STUART COMPANY

Stuart

Pasadena 1, California

† Trade Mark



More protection for
your prenatal patients

Stuart Prenatal

A better balanced
prenatal product

**CONTAINS BOTH GROUPS
IN ONE PRODUCT**

DOSE: 1 to 3 tablets daily

3 TABLETS PROVIDE:

Vitamin C	200 mg.
Vitamin B ₆	10 mg.
Ferrous Gluconate	9 gr.
Calcium	750 mg.

MORE VITAMIN C

MORE VITAMIN B₆

MORE IRON

CALCIUM FROM PURIFIED
VEAL BONE ASH AND
CALCIUM LACTATE

Vitamin A	6000 USP Units
Vitamin D	600 USP Units
Vitamin B ₁	3 mg.
Vitamin B ₂	3 mg.
Niacinamide	60 mg.
Calcium Pantothenate	10 mg.
Vitamin B ₁₂	6 mcg.
Vitamin K	1.5 mg.
Folic Acid	1 mg.
Phosphorus	285 mg.

Also traces of copper, zinc, manganese, magnesium, fluorine.

Available in bottles of 100
tablets at all pharmacies



THE STUART COMPANY Pasadena 1, California

ment of the regional lymph nodes do not occur.

Roentgenograms reveal uneven contours of the pubic arch and some osteoporosis. Bacterial studies of the inflamed bone and periosteum most often yield *Pseudomonas aeruginosa* and *Escherichia coli*. The strains are usually of low virulence.

Management consists of antibiotics, physiotherapy, and rest. The prognosis is usually good although healing may take six to twelve months.

Strict aseptic technic and elimination of trauma to the periosteum of the pubic bone and surrounding tissues often prevent the disease.

Brun's Beitr. klin. Chir. (Munich) 189:138-168, 1954.

DENMARK

Management of Tetanus

The ultimate cause of death in tetanus is asphyxia from spasm of respiratory muscles. This spasm can be released by the use of muscle relaxants and anesthetic agents but anesthetization of patients for days or weeks is required. Such a procedure involves problems not usually encountered in anesthesiology. Careful surveillance of the patient is of utmost importance.

Dr. H.-C.-A. Lassen and associates of the Blegdamshospitalet, Copenhagen, tracheotomized and anesthetized 5 patients with severe

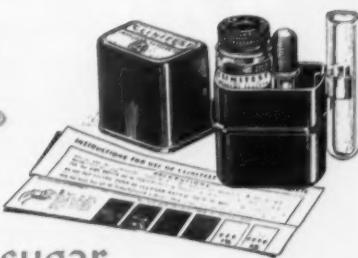
(Continued on page 68)

for early detection and better control of diabetes

"Make a routine urine sugar test
on every patient."*

CLINITEST®
BRAND
REAGENT TABLETS

for detection of urine-sugar



*Barach, J. H.; Duncan, G. G.; Joslin, E. P., and Root, H. F.: Diabetes Mellitus, in Conn, H. F.: Current Therapy 1954, W. B. Saunders Company, Philadelphia, 1954, p. 368.

AMES DIAGNOSTICS • Adjuncts in Clinical Management

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Ames Company of Canada,
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and time-saving

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Whether surgeon, proctologist, internist or general practitioner set 400D should appeal to you. It's exceptionally simple, practical and free of complex fittings. 400D provides instant conversion from proximal to distal lighting. Specula are brass, heavily chromed. The two major specula have deep complete circle calibrations. Extra-legible numbers are etched on two sides. Price is so moderate it is easily "the best buy on the market."

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nonsensitizing . . . rapid acting . . . topical anesthetic

XYLOCAINE® OINTMENT ASTRA

(Brand of lidocaine*)

a new form of the widely accepted Xylocaine Hydrochloride solution



- Xylocaine Ointment provides unusually rapid, and deeply penetrating anesthesia without the drawback of toxicity, sensitization or irritation. Xylocaine is unique in this respect.

- For use in the control of itching, burning and other dermatologic distress. May also be applied liberally on skin and accessible mucous membranes to prevent pain during examination or instrumentation.

- Available in a water soluble, nonstaining vehicle as 2.5% and 5%.

Xylocaine base in collapsible tubes or wide-mouth jars, each containing 35 grams (approx. 1.25 ounces).

Xylocaine Ointment is now made available at the request of many physicians, surgeons, and anesthetists who routinely use Xylocaine Solution.



Astra Pharmaceutical Products, Inc.
Worcester 6, Massachusetts



*U. S. Patent No. 2,441,498

FROM ABROAD

tetanus with barbiturates and nitrous oxide. Muscle relaxation was obtained with *d*-tubocurarine.

Positive pressure respiration was maintained for over two weeks until the patients could be withdrawn from the anesthesia without convulsions. The volume of respiration was governed by constant surveillance of the blood pressure and frequent blood chemistry determinations, particularly blood pH, oxygen saturation, and carbon-dioxide combining power. Nutrition was maintained by parenteral feeding.

Of the patients, 3 recovered without apparent residual lesions, 1 developed myocarditis and leukopenia, and 1 died of myocarditis and sepsis.

Presse méd. (Paris) 62:1403-1405, 1954.

ARGENTINA

Bronchial Irrigation

An adequate concentration of antibiotics may be maintained in areas of chronic pulmonary infection by sustained bronchial irrigation.

Dr. Andrés Martínez Marchetti of the National Academy of Medicine, Buenos Aires, inserts a polyethylene tube into the main bronchus under topical anesthesia. The tube is secured outside the nares and solutions are infused slowly and continuously after proper positioning of the patient. A flow of 5 drops a minute is tolerated by most patients. Infusions may be continued for an hour at a time for several hours with half-hour rest periods.

DORIDEN®
(glutethimide CIBA)

totally new nonbarbiturate hypnotic-sedative

- In most cases —
- Rapid onset—15-20 minutes
- Lasts 4-8 hours
- No hangover

Dosage:
0.25 to 0.5 Gm.
before bedtime.

Scored 0.25- and 0.5-Gm.
tablets.

C I B A Summit, N. J.

B/20644



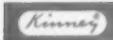
the unique two-way approach of COACTYN
provides the answer for rapid and prolonged
relief in functional g.i. distress

Coactyn

trademark

the pH Adjusted Antispasmodic

COACTYN, with its new *two-way approach* in antispasmodic therapy, not only acts directly on the g.i. tract to relax smooth muscle cells within seconds, but simultaneously blocks the overactive parasympathetic nerve impulses, with a resultant prolonged spasmolytic effect.



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Each teaspoonful (5 cc.) contains:
phenobarbital 8 mg.
homatropine methylbromide . . 0.5 mg.
in a pH adjusted phosphated carbohydrate solution
alcohol, 9.5%

supplied in bottles of
3 fl.oz. and 16 fl.oz.

FROM ABROAD

The tube may be left in place up to sixteen days. Soft diets are given to prevent solids and fibers from adhering to the tube and causing respiratory obstruction.

Prensa méd. argent. (Buenos Aires) 41:2817-2819, 1954.

GERMANY

Local Anesthesia Additive

When hyaluronidase is added to a local anesthetic solution, the onset and spread of anesthesia is greatly accelerated. Tensility of the soft tissues is also increased.

Dr. Hans Valentin of the City Hospital, Hanau, used hyaluronidase in 100 obstetric and gynecologic patients and found the agent

especially useful in preventing lacerations in primiparas with high, rigid perineal bodies and in multiparas with scars from previous episiotomies or other perineal trauma.

Such procedures as dilatation and curettage are also facilitated when the enzyme is employed.

Zentralbl. Gynäk. (Leipzig) 76:1216-1220, 1954.

Destruction of Vitamin B₁₂

Large amounts of vitamin B₁₂ are destroyed in the gastrointestinal tract of patients with pernicious anemia, mainly as the result of changes in the intestinal flora.

Drs. Kurt Hausmann, Lotte Lud-

(Continued on page 74)

VI-MAGNA*

Multivitamins

CAPSULES GRANULES SYRUP

LEDERLE LABORATORIES DIVISION, AMERICAN
Cannery
Pearl River, New York

VI-MAGNA Capsules: sealed; dry filled, easy to swallow. Contain all essential vitamins, including Folic Acid and B₁₂.

VI-MAGNA Syrup: orange-lemon flavor (no "fishy" taste or odor), can be mixed with fruit juice, milk, or infant formula. Contains nine essential vitamins, including B₁₂.

VI-MAGNA Granules: orange-flavored (no "fishy" taste or odor), readily dissolved in liquid or mixed with solid food. All essential vitamins, including Folic Acid and B₁₂.

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news! IMPORTANT PRICE REDUCTION

Furadantin

T A B L E T

prices reduced

18%



The rapidly expanding routine use of Furadantin in acute and chronic urinary tract infections has enabled us to make an average reduction of 18% in the cost to your patients.

50 and 100 mg. tablets. Furadantin Oral Suspension, 5 mg. per cc.



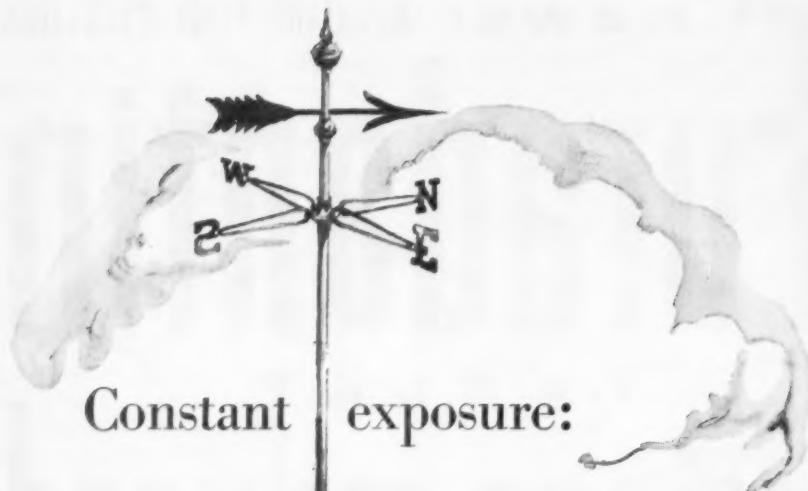
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FURADANTIN®

brand of nitrofurantoin, Eaton

for true economy in urinary tract infections



THE infant's perineal area is constantly exposed to many factors conducive to irritation. Keeping the skin of this area soft and supple is a frequent pediatric problem.

Johnson's Baby Cream is an ideal protective agent which, when used routinely, prevents chafing, chapping and similar conditions.

Its ingredients are carefully blended to supply sufficient amounts of both moisture and oil to the skin, helping it to resist the irritant effects often caused by urine, heat and other factors.

This highly emollient, non-medicated cream is specifically formulated to meet the most exacting professional requirements.



Johnson's Baby Cream

Johnson & Johnson

for "This Wormy World"



SYRUP

TABLETS

'ANTEPAR'*

effective against

PINWORMS

and

ROUNDWORMS

*'Antepar' is well-tolerated and pleasant to take.

'SYRUP OF 'ANTEPAR' Citrate brand Piperazine Citrate, containing the equivalent of 100 mg. piperazine hexahydrate per cc.

Bottles of 4 fluid ounces, 1 pint and 1 gallon.

'TABLETS OF 'ANTEPAR' Citrate brand Piperazine Citrate, available in two strengths equivalent to either 250 mg. or 500 mg. piperazine hexahydrate, scored.

Bottles of 100.



BURROUGHS WELLCOME & CO. (U.S.A.) Inc., Tuckahoe 7, N. Y.



Edrisal*

S.K.F.'s antidepressant
analgesic

for optimum results in
headache



always prescribe

2

'Edrisal'
tablets
per dose

Smith, Kline & French
Laboratories, Philadelphia

*T.M. Reg. U.S. Pat. Off.

wig, and Kurt Mulli of St. George Hospital, Hamburg, find that the poor absorption and destruction are due mainly to peroxidase- and catalase-forming bacteria. Oral administration of vitamin B₁₂ is therefore considered of little value for pernicious anemia.

Acta haemat. (Basel) 11:223-240, 1954.

Initiation of Labor

Experiments in rats suggest that the initiation of labor occurs as a function independent of the pituitary or adrenal glands. Lactation, however, is apparently dependent upon endocrine regulation.

Drs. Helmut Willig and Herbert Schrimpf of the Medical Academy, Düsseldorf, performed hypophysec- tomies and adrenalectomies on animals in different stages of pregnancy. Hypophysecomy often caused death within forty-eight hours in pregnant rats and within three weeks in nonpregnant animals. Adrenalectomy did not interfere with the course of pregnancy.

Among animals that lived to de- livery, labor started at the expected time; however, none of the animals nursed their litters.

Ärtzl. Forsch. (Munich) 8:468-472, 1954.

Scarlet Fever Infection

Wounds and burns may provide an entry for scarlet fever, according to Dr. Irmgard Guber of the University of Heidelberg.

The incubation period of this form of scarlet fever is much shorter than usual, averaging two to three days. Tonsillitis and pharyngitis do not always occur and are usually mild. Smears taken from

(Continued on page 78)

when you diagnose cow's milk allergy,
remember:



Meyenberg Evaporated

1. Goat Milk is a natural milk.

2. Patients allergic to the lactalbumin of cow's milk
can usually tolerate goat milk.

3. No crude fibers which can cause the diarrheas usually
associated with cow's milk substitutes.

Meyenberg Evaporated Goat Milk is very similar in taste to evaporated cow's milk, and nutritionally equivalent in fat, protein and carbohydrates. It provides a small, readily-digestible curd.

For over 20 years, Meyenberg Evaporated Goat Milk has been a first choice for quick control of cow's milk allergy.

JACKSON-MITCHELL
PHARMACEUTICALS, INC.
Culver City, Calif. - Since 1934



In economical 14-oz.
vacuum-packed enamel-lined
cans. Write for literature.

through the Menstrual Years of Life ...

THE frequency with which the menstrual life of so many women is marred by functional aberrations that pass the borderline of physiologic limits, emphasizes the importance of an effective uterine tonic and regulator in the practicing physician's armamentarium.

In ERGOAPIOL (Smith) with SAVIN the action of all the alkaloids of ergot (prepared by hydro-alcoholic extraction) is synergistically enhanced by the presence of apiol

and oil of savin. Its sustained tonic action on the uterus provides welcome relief by helping to induce local hyperemia, stimulating smooth, rhythmic uterine contractions and serving as a potent hemostatic agent to control excessive bleeding.

May we send you a copy of the booklet "Menstrual Disorders", available with our compliments to physicians on request.

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INDICATIONS

Amenorrhea, dysmenorrhea, menorrhagia, metrorrhagia and in obstetrics.

ERGOAPIOL ^(SMITH) with SAVIN

The Preferred Uterine Tonic



DOSAGE

1-2 cap. 3-4 times daily

SUPPLIED

In critical phgs. of 20 cap.

in
stress...

DEFENSE

with
citrus



Maintenance of adrenocortical function as a cornerstone of resistance in stressful life situations helps prevent disorders characteristic of the general adaptation syndrome. Since vitamin C is essential to production of anti-stress hormones by the adrenal cortex, an ample intake of readily utilized natural vitamin C as provided by citrus fruits and juices is desirable.

FLORIDA CITRUS COMMISSION • Lakeland, Florida

FLORIDA *Citrus*
ORANGES • GRAPEFRUIT • TANGERINES

the pharynx are ordinarily negative for hemolytic streptococcus. Erythema is intense around the wound or burn.

Treatment consists of administration of antibiotics and adequate care of the wound or burn.

Arch. klin. Chir. (Berlin) 277:523-535, 1954.

Delivery after Cesareans

When a patient has once had a cesarean section, an effort should be made to deliver the next child vaginally unless specifically contraindicated.

Dr. H. Frangenheim of the Wuppertal Hospital reports on 242 patients who were delivered vaginally after having cesarean sections for previous pregnancies. The duration of labor was usually sixty to ninety minutes more than usual; rupture of the uterus occurred in 9 patients. Forceps were necessary in 13% of cases. No mothers died.

Oxytocic agents should be avoided in such cases.

Deutsche med. Wochenschr. (Stuttgart) 79: 1451-1455, 1954.

RUSSIA

Tick Fever Encephalitis

Acute poliomyelitis may be simulated by tick fever encephalitis, according to Dr. G. L. Khasus of the Medical Institute, Kazan.

Typical symptoms of acute anterior poliomyelitis were noted in 110 patients from an area in which tick fever was endemic. Motor disturbances appeared at the peak of the disease in 89 patients and within one to twelve months after the

acute stage in 21. Paralysis and paresis most frequently involved the muscles of the neck and arms. Reflexes were abolished or greatly decreased in affected muscles and electromyographic examination revealed degenerative changes. Cranial nerves were involved in 71% of patients.

High fever and mental confusion occurred during the acute stage; cerebrospinal fluid examinations did not reveal any significant changes.

J. Nevropat. i Psichiat. (Moscow) 54:224-226, 1954.

FRANCE

Adrenocortical Atrophy

Because of stimulating effects on the hypophysis, salicylates prevent adrenocortical atrophy due to prolonged cortisone administration.

Dr. B. N. Halpern and associates of the Broussais Hospital, Paris, observed the effect of salicylates administered by inunction to laboratory animals given cortisone. Control animals were given subcutaneous injections of cortisone for ten days. The others received daily inunctions with diethylaminosalicylate in addition to cortisone.

On the eleventh day, the animals were sacrificed and the weight and ascorbic acid content of the adrenals were determined. The adrenals of animals given cortisone alone showed a 30% decrease in weight and a pronounced depletion of ascorbic acid. Neither of these changes was found in animals given the salicylate.

Compt. rend. Soc. de Biol. (Paris) 148:1050-1053, 1954.



IN ALL DOSAGE FORMS

Fellows CHLORAL HYDRATE



**BEST for REST
and
RELAXATION!**



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Washington LETTER

Congress Not Favorable to All Health Proposals

THE federal budget, a massive document loaded with statistical tables and interlaced with qualifications and cross references, is generally misleading as well as confusing. It represents what the executive department estimates, early in the Congressional session, will be needed to run the government for the fiscal year starting next July 1. But the story is not complete. The administration explains to Congress in the budget report that later on in the session other money requests not included in the actual budget totals on which the estimated deficit is based will be made.

This year, when everything is taken into consideration, it appears that Mr. Eisenhower would like the Congress to vote for health pro-

grams at least \$325 million more than is being spent this year for the same purposes.

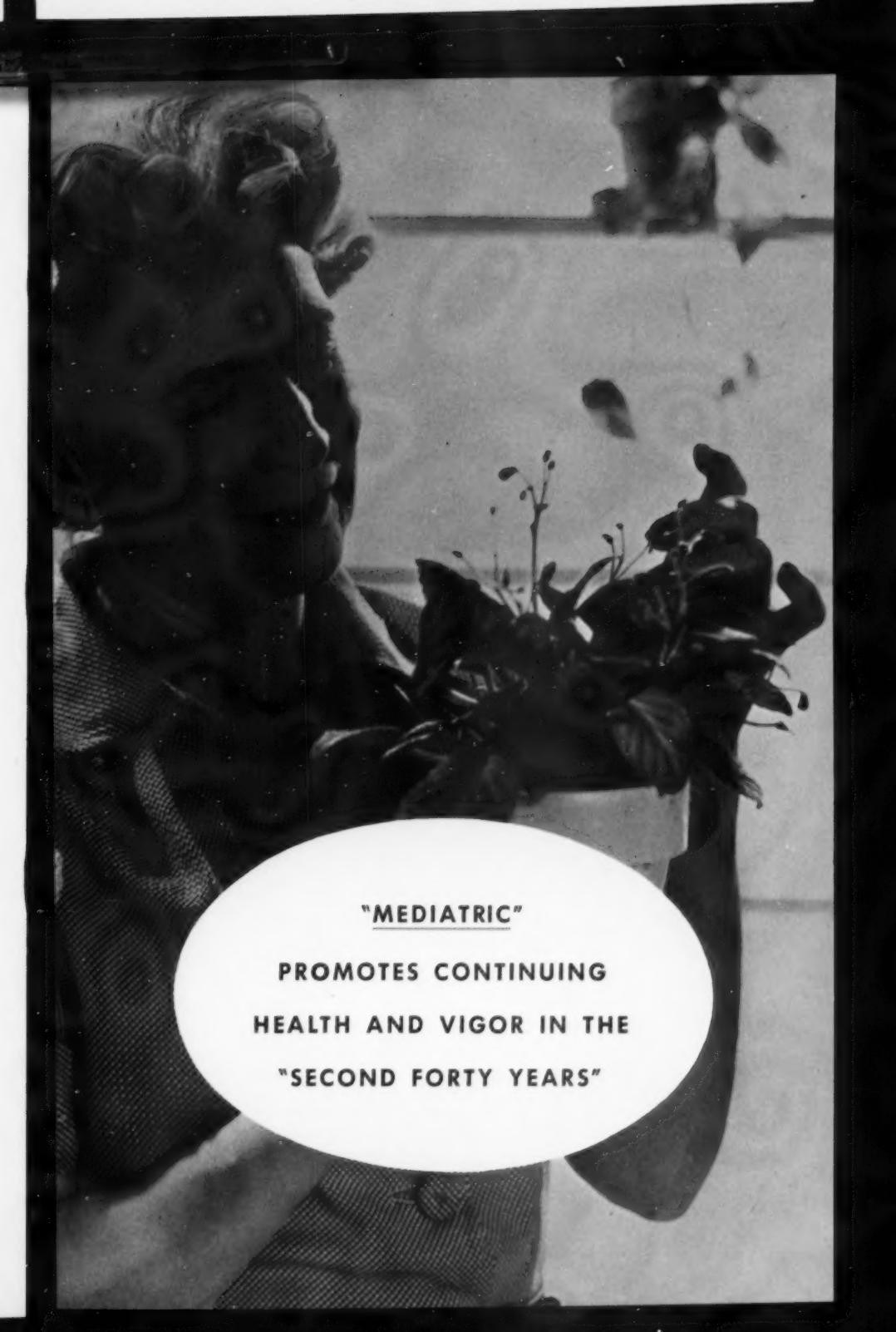
The total actually is academic, because there is almost no chance that the Democratic Congress will enact all the new programs proposed by the Republican President. When the dust has settled, it may be that the Democrats will have spent more for their own health bills than the President asked for his, but the dollars will not be dispatched in the same direction.

Five new programs proposed by the President would account for about \$165 million of the \$325 million additional cost:

- The administration's once-defeated reinsurance plan, \$25 million
- A program of more federal assistance to pay the medical bills of public welfare cases, \$20 million
- A plan for more, better, and more standardized medical care for military dependents, about \$55 million
- A program of federal contributions toward health insurance for federal civilian employees, about \$55 million
- A fund for federal guarantees of private loans on health facilities, particularly of the group practice type, \$10.5 million



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the individual can look forward to an even better “second forty years” if timely constructive measures are taken to delay the onset of functional impairment. “Mediatric” will help prevent premature atrophic changes due to waning sex hormone function and faulty dietary habits.



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the maintenance of health and vigor depends largely on the patient's ability to resist environmental stress. “Mediatric” will aid in building up resistance to three important causes of disability: gonadal hormone imbalance, dietary inadequacy, and emotional instability.



IN THE 70's AND 80's

life gains in richness and satisfaction for the elderly man or woman who is protected from disabling functional impairment. In this age group, “Mediatric” can be extremely valuable in maintaining physical vigor, improving muscle tone, and restoring emotional balance.



*Johnson, W. M.: Maryland State
M. J. 1:582 (Dec.) 1952.

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Aging patients have responded to combined estrogen-androgen therapy with an increase in body weight, improved strength and vigor, and a restored sense of well-being.¹ In both men and women, preventive steroid therapy "may ease and retard the aging process"² and, in some cases, help "to repair some of the damages."¹ It is well established that estrogen and androgen, employed together, have a greater effect on bone and protein metabolism than either steroid, alone.³ The incidence of side effects is minimized by reason of the opposing action of the two steroids on sex-linked tissues.

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IN PREVENTIVE GERIATRICS

1. Goldzieher, M. A., and Goldzieher, J. W.: *Endocrine Treatment in General Practice*, New York, Springer Publishing Company, 1953, p. 23.
2. Benjamin H.: *J. Insur. Med.* 6:12 (Dec.-Jan.-Feb.) 1950-1951.
3. Reifenstein, E. C., Jr., in Harrison, T. R.: *Principles of Internal Medicine*, Philadelphia, The Blakiston Company, 1950, p. 655.

**"MEDIATRIC" PROVIDES A CONSTRUCTIVE APPROACH
TO BETTER HEALTH FOR THE AGING PATIENT**

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NUTRITIONAL SUPPLEMENTS . . . to meet the needs of the aging patient
plus A MILD ANTIDEPRESSANT . . . to promote a brighter mental outlook

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Each capsule contains:

Conjugated estrogens equine ("Premarin"®)	0.25 mg.
Methyltestosterone	2.5 mg.
Vitamin C (ascorbic acid)	50.0 mg.
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Vitamin B ₁₂ U.S.P. (crystalline)	1.5 mcg.
Folic acid U.S.P.	0.33 mg.
<i>d</i> -Desoxyephedrine HCl	1.0 mg.

Contains 15% alcohol

No. 910 — bottles of 16 fluidounces and 1 gallon.



So far, Congress has indicated that no objection will be raised to the federal employee health insurance plan, and that the more expensive program for keeping military dependents healthy may be accepted. It is very critical of the reinsurance idea, as it was last year, and appears in no hurry to enact most of the other proposals.

The President's requests for an additional \$160 million for established health programs is receiving cordial treatment on Capitol Hill. The more important of the proposed increases are:

1] For Veterans Administration, to pay for medical and hospital care and some new construction, \$29 million

2] For the Federal Civil Defense Administration, to be used exclusively for the purchase of medical supplies to be stored regionally in anticipation of atomic attack, \$9 million

3] For construction grants for hospitals and clinics under the Hill-Burton program, \$29 million. The old H-B program, for complete hospitals, is scheduled for \$10 million less than in the current year, but the new program for clinics, rehabilitation centers, and so on is scheduled for \$39 million more.

4] For various Public Health Service programs, particularly in research, \$77 million

5] For help in nurse education

(Continued on page 84)

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- Reduction of Swelling
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I. Magnuson, P. B. et al: J. Mich. State Med. Soc., 46:71

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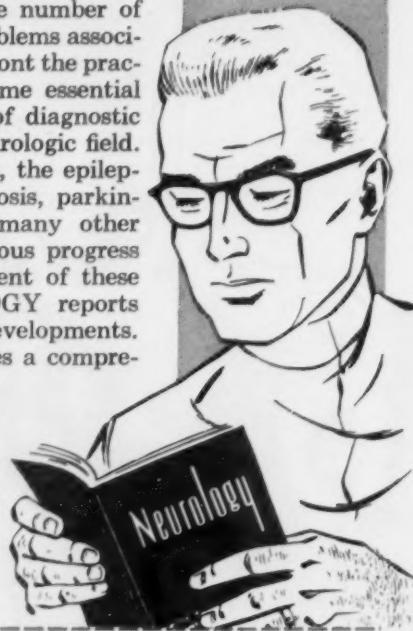
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WASHINGTON LETTER

and in special public health projects, \$16 million.

Although the President's budget provides liberal increases for research on cancer, heart conditions, and mental diseases, Congress will probably bring these totals still higher. Also, in recent years Congress has voted more money for H-B projects than the White House requested.

MEDICAL ACADEMY

While Congress was considering a two-year extension of the Doctor Draft, Rep. Charles E. Bennett (D., Fla.) offered his own idea of how the military services could keep up their supply of doctors. Mr. Bennett, who had poliomyelitis during

his Marine service in World War II, thinks that a military medical academy is one of the answers.

Mr. Bennett has proposed an initial appropriation of \$25 million to start the project. The nominations would be made somewhat on the same basis as to Annapolis and West Point, but more nominations would be made than available appointments to insure the high quality students through competitive examinations.

After graduation, the young doctor would be obligated for five years' service in Army, Navy, or Air Force, after which he could go on inactive duty, but with obligation for another three years of active

Continued on page 90

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Indications: *acute rhinitis chronic rhinitis bacterial rhinitis
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'Trisocort SprayPak' contains 3 antibiotics—gramicidin, polymyxin and neomycin—to inactivate those gram-positive and gram-negative bacteria commonly found in upper respiratory tract infections.

2 Decongestants—for both rapid and prolonged relief of nasal congestion

'Trisocort SprayPak' also contains 2 superior decongestants—phenylephrine hydrochloride and Paredrine† Hydrobromide—to provide *both* immediate and prolonged relief of nasal blockage.

Low cost: Despite the fact that 'Trisocort SprayPak' contains hydrocortisone, 3 antibiotics and 2 decongestants, it is not expensive.

Available: 'Trisocort SprayPak' is available—on prescription only—in convenient $\frac{1}{2}$ fl. oz. plastic spray bottles.

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†T.M. Reg. U.S. Pat. Off. for hydroxyamphetamine hydrobromide, S.K.F.

Patent 2181845

Other patents applied for.





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WASHINGTON LETTER

tive duty if his services were needed.

The student would receive \$133 a month for personal expenses, in addition to all necessary college costs.

It is questionable whether the bill will make much progress this session. The Armed Forces themselves would prefer to experiment with military medical scholarships in nonfederal schools, legislation for which is now before Congress.

NARCOTIC ADDICTION

Without waiting for a special White House study commission to report, 41 Senators have jointly sponsored a bill to help solve the problem of narcotic addicts. They would, in effect, dismantle the pres-

ent federal machinery for handling addiction and start all over again. They suggest that the Bureau of Narcotics be reorganized and removed from the jurisdiction of the Treasury Department to the jurisdiction of the Attorney General's office. This would mean bringing the Federal Bureau of Investigation into the picture in place of the Treasury's enforcement agents. At the same time, far stiffer penalties would be imposed on habitual violators and those convicted of selling narcotics to minors.

A new Division of Narcotics Clinics would be established within the Public Health Service and given responsibility for [1] establishing

Continued on page 96



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And effective because . . . The synergistic effect of acetylsalicylic acid and PABA and the retarding action of PABA on salicylate excretion ensure high and sustained blood levels. Rapidly disintegrating capsules provide fast absorption and pain relief.

Pabirin is a **DORSEY** preparation.

Each capsule contains:

Acetylsalicylic acid 5 gr.

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Average dose: 2 to 3 capsules 3 or 4 times daily.

Supplied: In bottles of 100, 500 and 1,000 capsules.

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So sheer, your patients will wear it cheerfully—yet it gives correct, graduated support from ankle to thigh

Now you can prescribe elastic stockings that are truly sheer and inconspicuous. So sheer and dressy-looking, in fact, your patients can wear them without overhose. (No patient co-operation problem with *these* stockings.)

Yet sheer as they are, Bauer & Black elastic stockings give proper remedial support. They're knitted with rear-fashioning seam so that pressure is adjusted

to leg contours, avoiding undesirable constriction. Pressure decreases gradually from ankle up, gently speeding venous flow.

More doctors prescribe Bauer & Black elastic stockings . . . shouldn't you?

Shaded area indicates correct pressure pattern of Bauer & Black Elastic Stocking.



(BAUER & BLACK)

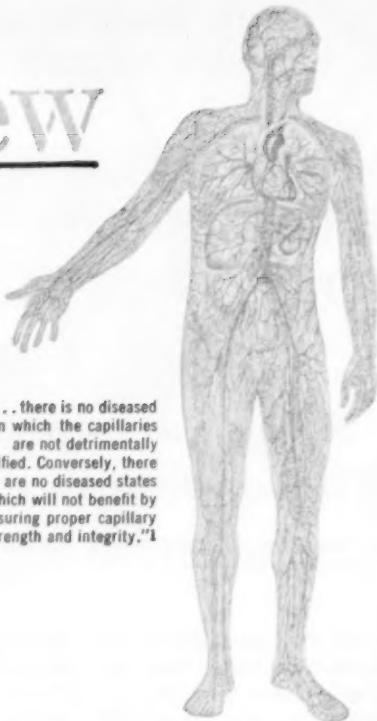
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Note: Clinical experience shows that success in restoring capillary integrity is in direct ratio to adequate dosage.

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Prevention of Vascular Damage in Roentgen
and Anticoagulant Therapy
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Fractures
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References:

1. Martin, G. J. (Editor): *Hesperidin and ascorbic acid. Naturally occurring synergists*. Basel, Switzerland. Messrs. S. Karger, 1954.
2. Bentsath, A.; Ruanyak, St. and Szent-Gyorgyi, A.: *Nature* 139: 326, 1937.
3. Bacharach, A. I.; Coates, M. E., and Middleton, T. R.: *Biochem. J.* 36: 407, 1942.
4. Bourne, G. H.: *Nature* 152: 659, 1943.
5. Zacho, C. E.: *Acta path. et microbiol. scandinav.* 16: 144, 1939.

^aSend for new HESPER-C brochure with Paul Feck drawings.

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and maintaining hospitals and other rehabilitation facilities; [2] helping states and private agencies to set up similar facilities; [3] training personnel for state and private institutions; [4] helping former addicts and alcoholics to obtain employment; and [5] promoting and encouraging private and volunteer organizations in this work.

The bill also would effect long-sought amendments in the law to make offenders against state narcotics laws eligible for treatment in federal hospitals.

Funds would be provided to expand and improve treatment and rehabilitation facilities and to promote educational and research work in narcotics.

Because of the widespread and nonpartisan support of this omnibus bill in the Senate, it is likely any suggestions from the President's committee will have to be fitted into this legislation rather than considered separately.

Washington Notes

The federal employee health insurance plan finally proposed represents a courageous attempt to offer complete medical care to about 2 million persons scattered all over the country. The modified catastrophic phase of the policy would provide treatment up to \$2,500. If the federal workers do not want to sign up for the national policy, they can join any acceptable local plan.

"Double-blind" Placebo-controlled Study Emphasizes Need for Stimulant Laxative in Chronic Constipation¹

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Caroid® and Bile Salts Tablets are deemed "particularly suited for use by the chronically constipated patient, especially the elderly, and by those postoperative patients in whom soft stools are particularly desirable."²

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CAROID AND BILE SALTS Tablets are ideally suited for use in the management of constipation, particularly when associated with biliary stasis and impaired digestion.

American Ferment Company, Inc., 1450 Broadway, New York 18, N. Y.

1. Cass, L. J., and Frederik, W. S.: Ann. New York Acad. Sc. 58:455 (July 15) 1954.

2. Shaftel, H. E.: J. Am. Geriatrics Soc. 1:549 (Aug.) 1953.

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Oral BICILLIN is effectively streptocidal; it meets two aims in the management of streptococcal sore throat—eradication of the infection and prevention of rheumatic complications.



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1. Peshkin, M.M., and others: *Ann. Allergy* 9:727 (Nov.-Dec.) 1951



Philadelphia 2, Pa.

PHENERGAN® EXPECTORANT

Promethazine Expectorant

with Codeine / Plain (without Codeine)

THE
EDITOR'S
PAGE

by WALTER C. ALVAREZ, *Editor-in-Chief*

What Illnesses Cannot Do

Many times each year, I see patients who are obviously manic or depressed, or suffering the mental agony of an agitated depression, or unable to work any more because of a brain wrecked by an unrecognized stroke, or greatly disturbed every few days because of severe migraine, psychomotor epilepsy, or hysterical storm.

Often, then, I feel distressed because some good medical brother, who knows far more than I do about many organic diseases, has been perfectly satisfied with the discovery of gallstones or duodenal ulcer, or some amebae in the stool, or colonic diverticulosis, or a small uterine myoma, or nephroptosis, or supposedly low blood pressure. With the discovery of one of these things he thought the diagnosis had been made, when actually a moment's thought would have shown him that the patient's brain must have been injured and the thing that the physician had put the blame on could not possibly be producing the symptoms.

Every time I see a friend grasping at what I call a diagnostic straw, I decide that I must again go out on the road to give my lecture on the all-important art of disregarding findings that have nothing to do with the case! Also I again wish that a great effort would be made in every medical school to find some keen clinician who once or twice a week would show the students a number of cases in which the findings really could not possibly account for the patient's complaints and hence should be disregarded.

After forty years of teaching medicine, I am convinced that

some of us spend too much time teaching the students what cholecystitis or peptic ulcer can produce in the way of symptoms but take no time telling them what these lesions cannot produce.

To illustrate: I recently saw an elderly woman who had been operated on by a professor of surgery. Removal of her gallbladder did her no good because her symptoms were all typical of an injury to her brain wrought by a series of four little strokes. Her gallbladder had not been producing any of her symptoms. The important point is that even if the gallbladder had been seriously diseased, this could not possibly have produced the woman's main complaint which was a constant, burning paresthesia in the skin over her left hip. This almost certainly was being referred from her injured brain.

Canker Sores in the Mouth

Many persons suffer greatly from repeated crops of canker sores in the mouth. These sores can be so painful that chewing and swallowing are difficult. Salivation may be so excessive that sleep is impossible.

Usually nothing gives satisfactory relief. Some physicians claim good results from cauterizing the floor of the lesion. The superficial ulcer may disappear spontaneously in about five days. Those that I have observed begin as a bleb, the top of which soon sloughs, leaving a white base. Most writers have called these "aphthous ulcers," which is a misnomer.

I suffered from these lesions most of my life until I was in my 50's. Then I kept a record of unusual foods eaten before each crop of ulcers appeared and discovered that in every case I had eaten chocolate. Today I know that if I inadvertently swallow even a few milligrams of chocolate I will have cankers. Sometimes when I have a cold I may have a sore which lasts for only two or three days and may be herpetic in origin.

Some of my patients have discovered that eating some food during emotional disturbance will induce the sores. One woman when at peace may eat anything, without cankers, but when a dreaded mother-in-law comes for a visit, sores promptly appear. Rarely a woman will have cankers in the mouth and also in the vagina.

Bronchiectasis: Diagnosis, Therapy

EDWARD J. BEATTIE, JR., M.D.

University of Illinois, Chicago

*Properly selected medical and surgical treatment can overcome most of the disability from bronchiectasis.**

IN bronchiectatic lungs, dilated, damaged bronchi are surrounded by acute or chronic inflammation. Atelectasis, pulmonary fibrosis, pneumonia, emphysema, and pleural adhesions may be associated with the disease. Bronchial obstruction and infection are the principal underlying causes.

DIAGNOSIS

Chronic cough productive of purulent sputum is the most common symptom. Frequently the sputum settles into three layers on standing, and the volume may exceed a cup a day. The breath is foul. Hemoptysis may range from streaking to gross hemorrhage. Fatigue and malaise are often so constant that the patient disregards the symptoms. Recurrent acute infections are associated with chills and sweats, and pleuritic pain is common.

Physical findings are variable; except for cough and sputum, objective signs may not be apparent. Rales are usually heard over the involved portions of the lungs, and slight fever is frequent. Pulmonary osteoarthropathy is proportional to

the severity of the disease. Acne of the face and trunk may be noted. Sinusitis is often severe.

The leukocyte count may be elevated during acute infections and secondary anemia is common. Since urine is usually normal, patients with albuminuria should be investigated for amyloid disease. Sputum culture reveals mixed flora unless the patient has pneumonia.

The chest roentgenogram may reveal nothing because dilated bronchi are invisible unless filled with fluid. At times, however, cystic areas or signs of pneumonia, atelectasis, or empyema may be observed.

Bronchograms, preferably combined with bronchoscopic examination, are essential to establish the diagnosis but the procedures should be avoided in patients with acute pneumonia, iodine sensitivity, cardiac failure, acute hemorrhage, or serious respiratory insufficiency. Before combined bronchoscopy and bronchography, the patient is given Nembutal, morphine, and atropine for sedation. The pharynx and tracheobronchial tree are anesthetized with 5% cocaine. Anesthesia should be discontinued if progressive apprehension and tachycardia appear, and Pentothal and oxygen should be available in order to combat convulsions.

Bronchoscopic examination may

*Bronchiectasis: diagnosis and treatment. M. Clin. North America 39:149-160, 1955.

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reveal inflammation of the mucosa, widening of the tracheal carina, obstructive lesions, or pus in the involved lobes or segments. Pus is aspirated for culture and Papanicolaou smears.

An oily iodine preparation is instilled into the trachea through a stiff 12F catheter. Fluoroscopic control is used, and spot films are made. Full chest films are made after the bronchi are filled. The lateral view is most valuable when one lung is filled with dye; anterior oblique films are made if both sides are filled.

Uniform dilatation of the bronchi denotes cylindric bronchiectasis; saccular bronchiectasis will be marked by globs of contrast material at the ends of the bronchi. Bronchial dilatation demonstrated within two months of an acute infection or bronchial obstruction may be reversible and does not necessarily signify bronchiectatic disease.

THERAPY

Medical management is directed to suppression of infection and freeing the diseased lung parenchyma from secretions. Postural drainage

three times a day and expectorants are used to keep the secretions thin and liquid and to empty the bronchi. Potassium iodide, 10 drops three times daily, is the preferred expectorant. Antibiotics may be necessary for severe intercurrent infections or pneumonia.

Surgical excision of the affected lung tissue often gives good results. When an entire lung is involved, resection should be done only if the other lung is not diseased. When bronchiectasis is bilateral, careful evaluation of exercise tolerance and pulmonary function is essential. The more involved side is resected first, and the patient is reevaluated before operation is done on the other lung.

Preoperative preparation should consist of intensive medical therapy, including antibiotics, to clear the respiratory tract. Anemia and malnutrition must be corrected. The patient is ready for surgery when the sputum is no longer purulent and the volume is only a few cubic centimeters daily. Postoperatively, coughing and deep breathing exercises are essential in order to preserve the greatest degree of pulmonary function.

¶ T-WAVE CHANGES IN ELECTROCARDIOGRAMS made after eating may falsely suggest improvement or progressive damage in persons recovering from myocardial infarction. Variations in the T wave may be attended by alteration of polarity, but Samuel M. Levit, M.D., and Bertram D. Dinman, M.D., of the Albert Einstein Medical Center, Philadelphia, find that other graphic components are not affected. Since T-wave configuration is the basis for comparison, serial electrocardiograms should be made while the patient is in a fasting state or several hours after eating.

J.A.M.A. 157:122-126, 1955.

Sex Hormones and Atherosclerosis

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*The hormonal influence of sex in the development of atherosclerosis is accompanied by recognizable changes in the distribution of lipids in plasma.**

ANATOMIC differences in the sexes and variation in the concentration of total lipids, cholesterol, or phospholipids do not explain the differences in the incidence of susceptibility to coronary atherosclerosis. Sex-linked dissimilarities in the distribution of lipoproteins, however, can be demonstrated by ultracentrifugation, paper electrophoresis, and fractionation of plasma.

Men apparently have atherosclerosis at an earlier age and to a greater degree than women. In men, the coronary arteries and the vessels of the lower extremities are more frequently and more extensively involved, while in women the abdominal aorta is most commonly implicated.

Coronary thrombosis and myocardial infarction occur 5 to 10 times as often in men as in women; under 40 years of age, the ratio is 25 to 1.

The sex differences in the incidence of coronary disease may be obliterated when strongly atherogenic diseases such as diabetes,

familial hypercholesterolemic xanthomatosis, and nephrosis exist.

The range of concentration of cholesterol and phospholipid in plasma is the same in males and females. Differences between the lipid compositions of the plasma of men and women have been detected, however, by fractionation of the lipoproteins. Young men have a greater concentration of beta lipoproteins, a smaller amount of alpha lipoproteins, a higher beta-alpha ratio, and more S_f 10-20 lipoproteins than women.

Heparin causes rapid disappearance of postprandial hyperlipemia and chylomicronemia; the rate of clearing is faster in young women than in young men. In addition, mast cells are found in greater numbers in young women than in young men. This is a sex distinction which may be of considerable importance because of the supposed function of mast cells in the production of heparin.

In patients who have survived myocardial infarction and are regarded as atherosclerotic, the beta lipoproteins are increased and the alpha lipoproteins are correspondingly diminished; the concentration of S_f 10-20 lipoproteins is also augmented. The heparin concentration is below normal and the num-

*Influence of sex and sex hormones upon the development of atherosclerosis and upon the lipoproteins of plasma. *J. Chronic Dis.* 1:63-85, 1955.

ber of tissue mast cells is diminished.

For experimental studies, the domestic fowl has been selected because of the high incidence of atherosclerotic disease in birds. Both roosters and immature pullets have intimal thickening of the abdominal aorta. In commercially fattened cockerels, lipid and cholesterol are found in aortic lesions. In cockerels raised without cholesterol supplements, the aorta contains no demonstrable lipid. Puberty in hens and the administration of estrogens to the immature or male chick are accompanied by pronounced hyperlipemia. Cholesterol-induced atherosclerosis will produce extensive atheromatous lesions of the aorta in both hen and rooster and cause coronary atherosclerosis in the male bird but not in the laying hen. Estrogen inhibits the development of

coronary atheroma but does not affect lipid deposit in the aorta. Androgens given simultaneously with estrogens tend to prevent the feminizing effects of estrogen but do not interfere with the inhibitory action of estrogen on cholesterol-induced coronary atherosclerosis.

In man, gonadal hormones produce profound changes in the distribution of plasma lipids. Estrogen transforms the abnormal lipid pattern of myocardial infarction to one indistinguishable from that of healthy young women. The opposite effect is exerted by methyltestosterone which exaggerates the lipid abnormality of survivors of myocardial infarction and produces a coronary atherosclerosis pattern in normal individuals. Simultaneous administration of androgens and estrogens obliterates the chemical effect of the estrogens.

Prognosis of Treated Pneumococcal Pneumonia

THOMAS E. VAN METRE, JR., M.D., JOHNS HOPKINS UNIVERSITY, BALTIMORE, reports that treatment with antibiotics does not affect the significance of prognostic signs with pneumococcal pneumonia.

Regardless of therapy, mortality and incidence of slow recovery and suppurative complications increase with the age of the patient and when involvement is multilobar or pneumococcal bacteremia is associated. Death is also more frequent when leukopenia and infection are caused by Type 1 or 3 pneumococcus or the patient has concomitant disease, whereas persons with chronic alcoholism or infections due to Type 2 or 3 pneumococcus often have prolonged illness.

White-cell count below 5,000 before treatment is the worst prognostic sign. More than one unfavorable sign generally exists when pneumococcal pneumonia is fatal.

Pneumococcal pneumonia treated with antibiotics. *New England J. Med.* 251:1048-1052, 1954.

Rational Use of Quinidine

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*The benefits derived from quinidine therapy must be understood to justify the risk of death from the drug.**

THE controversies over quinidine arise because the medication is toxic and the mechanism of action is unknown. Chief cardiovascular effects are vasodilatation, lowered blood pressure, increased ventricular rate, and abolition of ectopic pacemakers. Extracardiac reactions include nausea, vomiting, diarrhea, visual and aural disturbances, headache, syncope, tremor, confusion, lethargy, and excitability. Respiratory failure is a rare complication. Allergic manifestations such as fever, thrombocytopenic purpura, and skin eruptions may occur.

Sensitivity to quinidine may be fatal. Untoward reactions are embolism and sudden death due, in some instances, to cardiac arrest. Therapy is begun with a test dose of 0.1 to 0.2 gm. and observation of the patient for thirty minutes to twenty-four hours. If no serious reactions are seen within an hour, usual dosage can be started.

Dosage schedules vary with the circumstances. Oral and intramuscular quinidine salts may be used interchangeably. For rapid effect, courses of 6 doses of 0.2 gm. at two-hour intervals are given; the

dose is increased by 0.2 gm. with each course. If the need is less urgent, 0.2 gm. is administered every four hours for twenty-four hours, with an increase of 0.2 gm. daily. Careful observation and frequent electrocardiograms are advisable.

Intravenous quinidine is safe if given slowly. An approximate rate of 25 mg. per minute is adjusted according to the patient's response.

Quinidine should not be administered if no reasonable material benefit to the patient can be expected, a significant conduction defect exists, or the patient has had previous idiosyncrasy or severe reaction to the drug.

Therapy should be discontinued with [1] severe extracardiac symptoms, [2] widening of the QRS complex of the electrocardiogram portending ventricular fibrillation, [3] a significant fall in blood pressure, or [4] onset of ventricular premature contractions or ventricular tachycardia. Auricular flutter regularly develops during administration of quinidine, and therapy need not be discontinued.

Quinidine treatment of arrhythmias is always risky. With *chronic auricular fibrillation*, expected benefits from quinidine must outweigh the probability of toxicity or death. Normal rhythm is restored in 53 to 89% of patients but does not al-

*The basis of quinidine therapy. Am. J. M. Sc. 220:89-102, 1955.

ways prolong life. No convincing evidence exists that cessation of fibrillation lessens the danger of systemic embolization.

The clearest indications for quinidine treatment of chronic auricular fibrillation are in young patients with no other signs of heart disease, in the rare person with cardiac insufficiency due solely to auricular fibrillation, in individuals with persistent auricular fibrillation after control of thyrotoxicosis, and in some patients with disabling palpitation. Attempted conversion of intractable congestive failure may be justifiable even though the fatality rate is appreciable. Subjective improvement is occasionally great.

Quinidine is frequently helpful in *paroxysmal supraventricular tachycardias* that are not stopped by sedation, vagal stimulation, or digi-

tal. Some patients with incapacitating heart-consciousness due to *ventricular premature contractions* are benefited by the drug. Results are good if no other evidence of heart disease exists.

The use of quinidine in *ventricular tachycardia* may be lifesaving unless the medication induced the arrhythmia. The oral dose is 0.2 gm. initially, with an increase of 0.2 gm. every four hours. Intravenous quinidine may be successful and should be accompanied by auscultation and electrocardiographic observation.

The drug should be tried in *recurrent paroxysmal ventricular fibrillation* if conduction is normal. Prophylactic quinidine after *acute myocardial infarction* may lessen the incidence of arrhythmia and premature beats.

Adrenal Steroids and Tuberculosis

J. RICHARD JOHNSON, M.D., AND WINTHROP N. DAVEY, M.D., UNIVERSITY OF MICHIGAN, ANN ARBOR, report that cortisone or corticotropin can be used with relative safety for tuberculosis if streptomycin is given concurrently as protection against deleterious effects.

Cortisone and corticotropin suppress the usual inflammatory reaction of the body to tuberculosis with impairment of granulation tissue formation, macrophage activity, and fibroblastic repair. Other desirable effects include relief of exhausting symptoms and, in the case of tuberculous meningitis, apparent prevention or reduction of mechanical constriction of cerebrospinal fluid circulation.

However, when given alone, the adrenal steroids may permit or even encourage spread of infection. Concurrent use of streptomycin affords protection from such effects.

The combination was used in therapy for 31 patients with active tuberculosis without ill effects and often with accelerated improvement of symptoms.

Cortisone, corticotropin, and antimicrobial therapy in tuberculosis in animals and man. Am. Rev. Tuberc. 70:623-636, 1954.

Intermediate Coronary Syndrome

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*An intermediate syndrome of coronary heart disease can be distinguished from angina pectoris and myocardial infarction.**

DIAGNOSIS of intermediate coronary disease is most readily made by exclusion. The condition can be differentiated from angina pectoris by an evaluation of the pain and from myocardial infarction by assessment of other clinical findings.

The intermediate syndrome should be suspected when pain persists more than a few minutes after elimination of the precipitating factor or after administration of a vasodilating agent. Often the pain arises without apparent cause. Unlike angina, the attacks frequently vary in location, radiation, and severity.

Except for pain, the physical examination may reveal nothing indicative of myocardial infarction. The patient appears well, the heart is ordinarily not enlarged, and the heart sounds are of good quality; the rhythm is regular. Blood pressure is ordinarily normal. However, because the sudden onset suggests myocardial ischemia and heart failure, infarction may be suspected. A definite diagnosis cannot be made until electrocardiographic changes give indisputable evidence of ab-

sorption of necrotic material from the heart.

With the intermediate syndrome, electrocardiograms may reveal depression of the RS-T segment and lowering or inversion of the T waves lasting only briefly. Q waves may appear suddenly in leads II and III and disappear just as rapidly. In some instances, no significant alterations are observed, but exercise and anoxia tests may be dangerous. Instead, the electrocardiogram should be repeated at frequent intervals to record transient changes.

The course of the intermediate syndrome is usually not severe unless complications arise. These may appear gradually or without warning. Sudden death from ventricular fibrillation may occur.

Sound judgment is required to avoid instituting unnecessary therapeutic measures and still prepare for the possibility of myocardial infarction. A period of observation is essential; the patient is allowed the freedom of the room but not anything more strenuous, including stressful diagnostic procedures. Such factors as age, nature and degree of underlying disease, and the feasibility of therapy should be considered. Anticoagulant drugs usually should not be employed in young, otherwise healthy persons with slight symptoms.

*The intermediate coronary syndrome. U. S. Armed Forces M. J. 6:1-7, 1955.

Pituitary and Adrenal Diabetes

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*Long-sustained hyperglycemia, regardless of the cause, may be sufficient to precipitate lasting pancreatic diabetes.**

DIABETES may be caused by failure of the beta cells of the pancreas or by an excess of [1] growth hormone, [2] corticotropin, or [3] adrenocortical 11-oxysteroids. Hyperglycemia is common to each form of the disease.

Present evidence suggests that growth hormone has diabetogenic power. The permanence of diabetes induced by the effects of growth hormone is apparently closely related to degeneration of pancreatic beta cells. When hyperglycemia can be corrected with insulin, this form of the disease either does not occur or can be reversed.

When diabetes is associated with acromegaly, difficulty arises in determining whether an excess of growth hormone is solely responsible or whether overproduction of corticotropin with coincident surplus of oxysteroids is also involved. Large adrenal cortices may accompany acromegaly, with consequent increased excretion of corticosteroids.

Diabetes with acromegaly ordinarily is not severe but may become

so during maintained pituitary hyperfunction and slowly or suddenly ameliorate when hypophysial function declines. Diabetes may be reversed by long-continued therapy with estrogen. Stilbestrol in doses of 10 to 50 mg. a day or ethinyl estradiol in doses of 1 to 5 mg. daily may be administered. Production of the growth hormone is apparently suppressed.

Patients with diabetes and *Addison's disease* are extremely sensitive to insulin but between periods of hypoglycemia blood sugar levels may rise rapidly to higher than 400 mg. per 100 cc. Insulin reactions in these patients are severe and dangerous.

The *cortisone-like hormones*—hydrocortisone, cortisone, corticosterone, and 11-dehydrocorticosterone—cause [1] deposition of glycogen in the liver, [2] increased blood and tissue carbohydrate, [3] increased excretion of nonprotein nitrogen and uric acid, and [4] reduced level of glutathione in the blood. Diabetes in latent form may become overt and permanent after the administration of cortisone or cortisone-like steroids.

Cushing's syndrome is caused by adrenal hyperplasia or adrenocortical tumors, and more rarely by pituitary tumors. Increased produc-

*Diabetes of anterior pituitary and adrenal cortical origin. *Diabetes* 3:349-357, 1954.

tion of 11-oxysteroid-like substances causes glycosuria alone, partly by direct action on the renal tubules, and causes both glycosuria and hyperglycemia by interfering with the action of the insulin, by impairing the utilization of carbohydrate, and by augmenting the breakdown of protein.

Such diabetes is relatively mild and insensitive to insulin. The dis-

ease may be accompanied by a negative nitrogen balance which is not fully corrected by administration of insulin.

Whenever Cushing's syndrome is caused by excessive corticotropin from a pituitary tumor, x-ray therapy may be relieving. In cases due to adrenal hyperplasia, removal of about 80% of adrenal tissue gives complete control.

HYPERPARATHYROIDISM AND BURNETT'S SYNDROME have similar symptoms but may be differentiated by the coexistence of azotemia and alkalosis and response to corrected diet in the latter disease. Laurence H. Kyle, M.D., of Georgetown University, Washington, D. C., finds that Burnett's syndrome results from renal impairment and alkalosis combined with increased intake of milk and alkalis. Whenever irreversible failure of the kidneys takes place, histologic examination of parathyroid tissue may be a necessary procedure.

New England J. Med. 251:1035-1040, 1954.

INTRAMEDULLARY INFUSION OF FLUIDS is preferable to hypodermoclysis when impalpable veins or restlessness precludes intravenous injection. Samuel Pillar, M.D., of the University of Rochester, N.Y., prefers infusion into the iliac crest because of the extensive capillary network and the ease and safety of approach. Of 35 intramedullary infusions, untoward effects were observed only in 1 patient when a powerful vasoconstrictor accidentally infiltrated the soft tissue.

New England J. Med. 251:846-851, 1954.

RHEUMATOID ARTHRITIS may be effectively and inexpensively treated with serum obtained from placental blood. Among 22 patients given this substance and adjuvant therapy by Millard Tufts, M.D., of Milwaukee, 16 were greatly benefited, 4 were slightly improved, and 2 were unaffected. The material, easily obtained by sterile technic from cord blood, is injected intramuscularly in 5-cc. doses twice weekly for two weeks and then once a week for eight weeks.

Wisconsin M. J. 53:615-616, 628, 1954.

Manifestations of Essential Hypertension

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*Incidence of essential hypertension is influenced by age and is almost equal in both sexes.**

ELEVATED blood pressure is noted infrequently among persons under 30 years of age. Incidence increases progressively with age and is greatest among individuals between 61 and 70 years old. Sex makes little difference in incidence.

Criteria for diagnosis of essential hypertension of over 1,000 ambulatory patients were an elevation of diastolic pressure above 92 mm. Hg measured while the patient was recumbent and absence of disease known to affect blood pressure.

Chest pain causes patients to consult a doctor more than any other symptom, though dyspnea is generally coexistent. Cardiac pain is most frequent in males. Pain and diastolic pressure are not correlated, but dyspnea is most frequent among persons with the highest blood pressure levels.

Headaches and giddiness occur more frequently among patients with elevated blood pressure than in normotensive persons, and incidence increases with diastolic levels. The symptoms can probably be caused by hypertension, but anxiety may be a factor in some instances.

Headaches are more frequent in females and giddiness is more common in males.

Palpitation is twice as common with hypertension as with normal pressure. Flatulence is noted in one-fourth of hypertensive individuals. Fatigue is most common among young females.

Though hypertension is considered a stress disease, subjective or objective nervousness is not related to diastolic pressure. Stress is probably an etiologic factor but cannot be detected by a general examination.

A ruddy complexion is often associated with hypertension, but the build of the patient does not seem significant.

Increase in cardiac size, gallop rhythm, and poor quality of the first sound at the apex are more common among males than in females, and incidence of heart enlargement and irregular rhythm is greatest at the highest levels of blood pressure. Frequency of cardiac murmurs is the same among men and women; aortic diastolic murmur is heard most often when pressure is above 120 mm. Hg.

Alterations in electrocardiograms are noted in over half of the patients. Frequency of left ventricular strain, typical of hypertensive heart

*Essential hypertension: an analysis of certain clinical and electrocardiographic features in a series of 1,011 cases. Glasgow M. J. 35:279-325, 1954.

disease, is about the same in both sexes and is proportional to blood pressure. In contrast, evidence of myocardial ischemia attributed to coronary insufficiency is most common among men and, in males, is not related to blood pressure.

The greater incidence of signs of coronary insufficiency, cardiac pain, and poor heart sounds in men than in women confirms the known male preponderance of ischemic heart disease.

According to the study, hypertension is not unusually frequent during the menopause. Vasomotor instability generally associated with the menopause is more common among women with high blood pressure than in those without, but the relationship is not limited to the menopausal age group. Signs of vasomotor instability are not correlated with a rising diastolic pressure so hypertension is probably not responsible.

Osmotic Pressure in Diabetes Insipidus

LEONARD S. DREIFUS, M.D., AND MARTIN N. FRANK, M.D., PHILADELPHIA GENERAL HOSPITAL, AND SAMUEL BELLET, M.D., UNIVERSITY OF PENNSYLVANIA, report that simultaneous determination of the osmotic pressure of the blood and urine is a useful adjunctive test for diagnosis of diabetes insipidus.

The patient does not eat for three hours and fifteen minutes before the osmotic pressure is estimated and defecates and urinates two hours and forty-five minutes before the test. The blood sample is heparinized, and the urine specimen is a half-hour portion. Pressure is determined by measuring the depression of the freezing point with a Beckman-type thermometer.

The ratio of osmotic pressure of the urine to solute concentration of the blood is less than 1 with uncontrolled diabetes insipidus. The value is greater than 1 after Pitressin is administered. Patients with psychogenic polydipsia and polyuria have a greater total solute concentration of urine than blood.

Serum and urine sodium and potassium may also be measured. After Pitressin is given, concentration of the electrolytes in the urine increases but excretion of the solutes remains constant; the phenomenon illustrates that Pitressin causes tubular reabsorption but not excretion.

Other signs of diabetes insipidus are [1] alleviation of symptoms after administration of Pitressin, [2] diuresis and chloruresis when hypertonic saline solution is infused intravenously, [3] no significant increase in the specific gravity of the urine with dehydration, and [4] failure of smoking or nicotine to inhibit water diuresis.

Determination of osmotic pressure in diabetes insipidus. *New England J. Med.* 25:1091-1094, 1954.

Extraction of Biliary Calculi

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*Removal of stones from the principal biliary ducts should be accomplished with instruments that eliminate indiscriminate probing.**

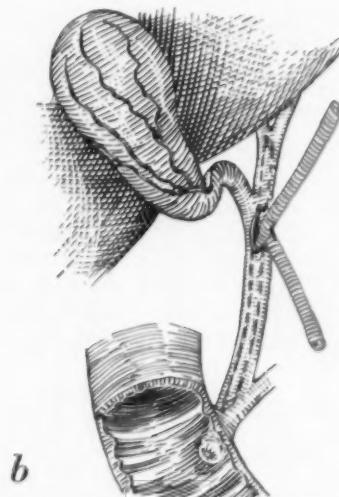
INSTRUMENTAL exploration of the biliary ducts for calculi may produce damage varying from excoriation of the mucosa to rupture of the sphincter of Oddi if implements are not satisfactory. Postoperative complications, including cicatricial stenosis, hemorrhage, peritonitis, and duodenal fistula, may result.

Attempts should not be made to impel calculi toward the gallbladder

or duodenum before surgery, since the stone may become imbedded or lost and walls may be damaged. Manual crushing of stones through the tunica of the canal; extraction of the fragments prolongs operation.

Exploratory catheters should be olive shaped at one end. Withdrawal of an implement with a ball point causes stretching and damage if the sphincter of Oddi contracts.

The probe may dislodge small stones, but extraction is generally accomplished with curets or nippers. Long curets frequently trau-



*Treatment of lithiasis of the principal biliary channels. *J. Internat. Coll. Surgeons* 22:664-672, 1954.

matize mucosa and may enlarge the surgical opening when the tool is inserted in the lumen or when stones are taken out.

A curet with a flexible 13-cm. stem and a detachable metallic handle 5 or 11 cm. long may be substituted. The stem may be curved according to the anatomy of the biliary duct, and the handle is not attached until the curet is in the lumen. A groove in the instrument permits simultaneous removal of several calculi.

Nippers in general use remove free stones but are hazardous if stones are impacted or duct walls are edematous.

Flexible, probing nippers with steel wire legs at one end can be used to extract inset calculi (Fig. a). The legs are maneuvered by a button at the other end. The mechanism that is controlled by the button and moves the legs is covered by a rubber or plastic probe and is removed while the calculus is taken out to prevent trauma.

The steel legs project when pressure is applied on the button; the tips remain together until distended by a stone so walls of the duct are not damaged. The stone is gripped and, when pressure on the button is released, lifted out by the legs.

If the surface of the stone is irregular and prevents seizure, the prongs are retracted while the instrument is rotated for another attempt.

After removal of calculi, the biliary tree is drained with 2 small catheters; one is inserted into the hepatic canal and the other penetrates into the lumen of the common duct with the end near the ampulla of Vater. The probes cross at the surgical opening (Fig. b).

The bile is collected, filtered, mixed with sulfuric ether, and decanted. The remaining ether is volatilized by immersing the container in warm water.

The lukewarm bile is injected into the common duct through the probe with a 100-cc. syringe held vertically with the top upward about 20 cm. above the patient. If the patient complains of colicky pain, the syringe is placed lower than the patient until pressure in the biliary tree decreases.

Injection of bile is repeated every twelve hours. The procedure enables the patient to eat on the first day after surgery and also permits postoperative cholangiographic examination. The probes can be removed separately without injuring the orifice of the biliary duct.

***COMPLETE STRIPPING OF VARICOSE VEINS** after high ligation of the saphenous vein is facilitated by a simple, malleable stripper of very fine twisted strands of stainless steel wire with various-sized replaceable olives for each end. Robert A. Nabatoff, M.D., of Mount Sinai Hospital, New York City, reports that the instrument is flexible but firm and permits passage through the narrowest veins.

West. J. Surg. 63:10-11, 1955.

Femoral and Iliac Arteriopathy

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*Femoropopliteal arterial liberation alone or with lumbar sympathectomy or arteriectomy or both is performed for femoral arteriopathy, and sympathectomy and arterial excision are done for iliac lesions.**

THOUGH only recently recognized as distinct entities, femoral and iliac stenotic diseases occur more frequently than any other arteritis of the legs except arteriosclerosis. Diagnosis of femoral lesions is determined by arteriographic examination; lumbar aortographic study is diagnostic for iliac disease.

FEMORAL STENOSED ARTERIOPATHY

Both typical and presenile forms of femoral stenosed arteriopathy result from the relationship of the femoral artery to the walls of Hunter's canal. The arterial wall is altered by contact with hard tissue, and lesions of parietal conjunctival hyperplasia, mostly in the tunica interna, are produced. The lumen narrows, the arterial wall degenerates, and perivascular fibrosis is noted.

Arterial claudication produces pain and cramping in the calf but not in the foot, toe, or ankle. The pedal, tibial, and popliteal pulses diminish or disappear. Pain is felt on compression of Hunter's canal.

The oscillometric index decreases or disappears from the lower third of the thigh.

Peripheral arterial insufficiency may be noted. Arteriographic study shows segmentary lesions of the lower part of the superficial femoral artery, while the other arteries are undamaged.

The typical form must be differentiated from thromboangiitis, a less frequent disease. Arteriopathy produces segmentary and singular lesions in the lower legs, is bilateral though predominant in one limb, is localized in the superficial femoral artery, and is of chronic progressive evolution. Thrombosis is a late development.

Thromboangiitis starts in vessels of small or medium diameter and progresses irregularly with acute or subacute attacks. Lesions are diffuse, segmentary, and multiple and occur in the upper and lower legs and sometimes in the visceral arteries. Thrombosis is an early occurrence.

Arteriographic examination is essential to differentiate the presenile form from arteriosclerotic arteritis. With arteriopathy, lesions in the femoral superficial arteries and especially in Hunter's canal are pronounced; other arteries of the leg remain almost undamaged.

Stenosed femoral arteriopathy is

*Femoral and iliac arteriopathy. *Angiology* 5:500-527, 1954.

SURGERY

treated by femoropopliteal arterial liberation. The tendon of the adductor magnus is sectioned, so the canal of the superficial femoral artery is opened widely. The superficial femoral and popliteal arteries are liberated from the surrounding fibrous adhesions. All collateral arteries are preserved.

Lumbar sympathectomy is added to arterial liberation when lesions and circulatory insufficiency are advanced.

If the femoral artery is totally obliterated, an arterectomy is employed with the other two interventions. Resection extends proximally and distally to a weak lumen and the first permeable collateral. To permit the widest progressive retraction of the cut arterial extremities, the arterial trunks of the central and distal extremities are liberated until the area where the vessel is free from periarterial fibrosis is reached.

ILIAC STENOSED ARTERIOPATHY

Intermittent arterial claudication begins in the thigh or buttock and extends to the calf with iliac stenotic disease. The patient has genital hypofunction and, when lesions are

bilateral, impotency. Pulses and oscillations in the leg are completely absent. Peripheral trophic disturbances are absent or of moderate degree.

Lumbar aortographic and phlebographic examinations are essential for diagnosis. Bilateral disease can be differentiated from aortic terminal thrombosis because claudication does not begin simultaneously in both legs and genital hypofunction is not total at the onset of the condition.

In contrast to iliac thromboangiitis, iliac arteriopathy is a localized, segmentary disease of chronic and progressive evolution, and arterial or venous thrombosis does not occur for a lengthy period of time.

Prophylactic treatment is important with iliac arteriopathy to avoid complications. Smoking is prohibited, decrease in blood volume is prevented when possible, and cardiac insufficiency is treated. Chilling, excessive effort, and trauma should be avoided.

Segmentary iliac arterectomy is performed through the extraperitoneum. Lumbar sympathectomy should be done at the same time.

¶ INTRAMUSCULAR TRYPSIN is more effective, safe, and economical than anticoagulants for thrombophlebitis, diabetic cellulitis, and indolent leg ulcers. Irving Innerfield, M.D., of Jewish Memorial Hospital, New York City, reports prompt subsidence of acute inflammation and early ambulation among 90 patients with peripheral vascular disease who received 0.5 cc. of Parenzyme, a suspension of trypsin in sesame oil, every four or six hours. The dose contains 2.5 mg. of the enzyme. In several instances of cellulitis with gangrene, amputation was obviated.

Surgery 36:1090-1100, 1954.

Sympathectomy for Vascular Disease

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AND FREDERICK A. COLLER, M.D.

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*Many patients with poor arterial supply of the lower extremities will derive benefit from lumbar sympathectomy.**

THE result of lumbar sympathectomy for peripheral arteriosclerotic vascular disease can be considered good only when alleviation of symptoms is significant and the patient is satisfied.

Classification of patients with the disease is often difficult because of such variables as duration of symptoms, extent of vascular involvement, subjective interpretation of pain intensity, and degree of tissue necrosis. However, the following divisions are suggested:

Group 1—Patients with intermittent claudication only

Group 2—Patients with slight pain at rest, with or without intermittent claudication. Mild sedatives control pain.

Group 3—Patients with severe constant pain with or without intermittent claudication. Narcotics are usually required to control pain.

Group 4—Patients with tissue necrosis with or without intermittent claudication or pain

Group 5—Patients with asymptomatic disease. Sympathectomy is

done in individuals with one amputation to improve circulation in the opposite leg.

No single consideration prohibits sympathectomy in groups 1, 2, and 3 if the patient's general condition does not constitute an operative risk. In group 4 patients, however, practical evaluation will often prevent useless sympathectomy. When a patient has extensive necrosis of the foot or lower third of the leg as a result of advanced arteriosclerosis obliterans, operation obviously will be of little benefit and should not be done.

Among factors important to pre-operative estimation of results are the age of the patient, severity and location of foot necrosis, tissue atrophy and capillary anoxia, degree of arterial involvement as manifested by palpation of peripheral pulses, concomitant diabetes, arteriosclerotic involvement of other organs, and the response to lumbar block. Duration of symptoms has little prognostic significance in groups 1, 2, and 3. In group 4, however, patients with symptoms lasting one to six months before operation often have amputation or die within a short time.

Atrophy of the soft part of the leg with severe capillary anoxia is

*A critical evaluation of lumbar sympathectomy for peripheral arteriosclerotic vascular disease. *Surgery* 37:115-129, 1955.

particularly serious and results are almost always poor. The significance of absent peripheral pulses below the femoral arteries depends upon careful correlation with other symptoms and physical findings. Obviously widespread vascular involvement does not necessarily exclude the possibility of obtaining benefit from surgery.

With severe pain, the prognosis is better if only the toes are involved and not the foot or the lower third of the leg. If popliteal pulses are palpable, the chances of satisfactory results with ischemic foot pain are increased.

Diabetic patients are less likely

to be improved than nondiabetic persons. Under 55 years of age, however, benefit may be expected in 50% of persons with diabetes. Over 65 years of age, results are generally poor, especially with arteriosclerotic involvement of other organs.

Bilateral sympathectomy is preferred to unilateral sympathectomy since some patients will have symptoms in the unsympathectomized leg within a short period after unilateral surgery. This is believed to be due to the precipitation of relative symptomatic peripheral ischemia as a result of added stress on the unsympathectomized limb.

Drainage of Perforated Appendicitis

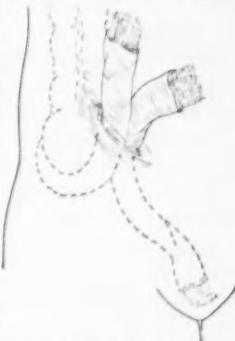
J. ROBERT MASSIE, JR., M.D., AND JOSEPH VANCE, M.D., MEDICAL COLLEGE OF VIRGINIA, RICHMOND, believe that intraperitoneal drainage greatly reduces the incidence of complications with perforated appendicitis.

After a McBurney incision and appendectomy, Penrose or cigarette drains are inserted, usually one in the pelvis and another in the lateral gutter or retrocecal area (see illustration). The wound is closed in layers about the drains. Streptomycin and penicillin are usually given, but no antibiotics or sulfonamides are placed in the peritoneal cavity.

Drains are removed in stages when the patient is afebrile, usually starting about the sixth postoperative day. Delay in removal is not dangerous.

Only 5 postoperative complications were observed among 87 patients: 2 instances of moderately severe paralytic ileus and 1 each of pelvic abscess, phlebitis, and overwhelming toxemia. Fecal fistulas, incisional hernias, wound abscesses, evisceration, and intestinal obstruction did not occur.

The treatment of perforated appendicitis. *Am. Surgeon* 20:1194-1198, 1954.



Surgery for Pilonidal Disease

JAMES S. DENNING, M.C., JOHN F. FREDERICK, M.C.,

DAVID GOLD, M.C., AND EDGAR J. POTI, M.D.

Lackland Air Force Base, San Antonio

*Use of a gluteal musculofascial flap lessens the chance for breakdown of scars and speeds recovery in the therapy of pilonidal cysts and sinuses.**

ALTHOUGH the exact etiology of pilonidal disease is still controversial, the condition is generally believed to be congenital. The majority of cases occur in individuals between 16 and 35 years of age. Recurrence seems to depend largely upon defective closure of the sacral defect after complete cyst excision. Recurrent drainage tracts are especially noted in the distal third of the wound.

No single method of treatment has proved completely satisfactory. Corrective procedures can be divided into open and closed technics. Disadvantages of open methods include prolonged postoperative care and possible pocketings in deep granulation and early bridging of skin edges. Therefore, a closed technic that would properly consider anatomic structure and permit adequate excision would seem preferable.

Major factors to be considered in wound healing include obliteration of dead space, asepsis, adequate blood supply, and avoidance

of tension. A direct fat-to-fascia closure results in poor blood supply and unsatisfactory healing. An intact anococcygeal raphe will cause a dimple that may allow hair to migrate into the area and form a new draining sinus tract.

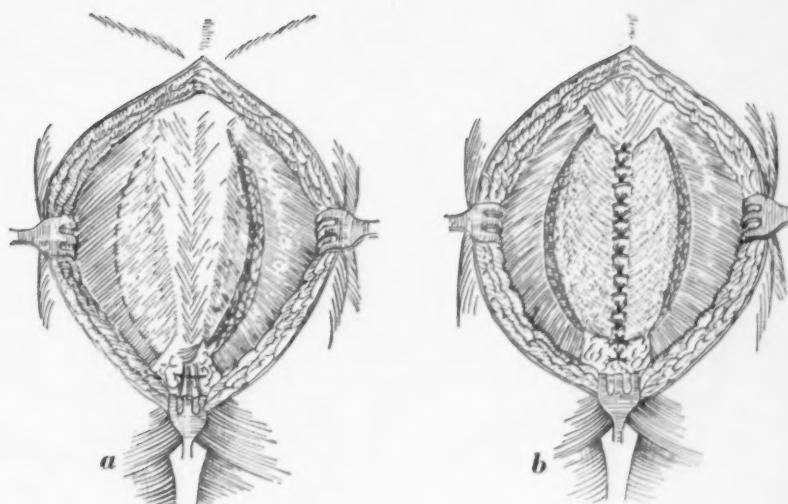
With use of a gluteal musculofascial flap, dead space is filled, a good vascular pad over the sacrum and coccyx is supplied, final closure without tension is permitted, and recovery is speeded due to granulations from the muscular floor.

Twenty-four hours before operation, the patient is given castor oil, neomycin, and Sulfathalidine. For surgery, the patient is placed in a prone, jackknife position. The diseased area is removed en bloc by elliptic incisions that extend down to the sacrococcygeal fascia. Hemostasis is obtained by warm packs and electric coagulation, with occasional suture-ligatures, or by use of suture-ligatures of No. 000 plain catgut.

After deep subcutaneous fat is reflected from the gluteal fascia, longitudinal incisions, 1.5 cm. deep, are made into both gluteal muscles (Fig. a).

Incisions are 2.5 to 3 cm. lateral to the sacral and coccygeal attachments of the muscles. The medial portions of the flaps are inverted

*Pilonidal disease. Am. Surgeon 20:1250-1257, 1954.



and sutured in the midline over the sacrum and coccyx (Fig. b).

The anococcygeal raphe is then transected, obliterating the deep natal cleft just proximal to the anus and allowing the flaps to fill dead space. The lateral portions of the flaps are allowed to retract, since attempts at approximation would increase tension in the wound. Penrose drains are placed along the depths of the gluteal incisions bilaterally and brought out through proximal and lateral stab incisions.

The remainder of the incision is closed with 2 rows of interrupted plain catgut sutures in the subcutaneous tissue and a running cuticular suture of silk in the skin.

For five days postoperatively, the patient remains in bed in prone position, is given 1.5 gm. of Sulfa-thalidene every four hours, and is maintained on a low-residue diet with paregoric and bismuth. Drains are removed on the third or fourth day, and ambulation is usually complete by the tenth day.

DISSEMINATED MAMMARY CANCER may be ameliorated or controlled by bilateral adrenalectomy. Sir Stanford Cade, F.R.C.S., of Westminster Hospital, London, reports that pain was relieved, lesions regressed, skeletal metastases reossified, and fractures healed in about 60% of 56 subjects treated with this method. Patients are subsequently given maintenance doses of cortisone. Adrenalectomy should not be performed when carcinoma has metastasized to the heart and lungs.

Brit. M. J. 4904:1-5, 1955.

Chemosurgical Removal of Facial Cancer

FREDERIC E. MOHS, M.D.

University of Wisconsin, Madison

*With radioresistant facial cancers, microscopic control of chemosurgical excision makes possible complete removal of not only the main mass of tumor but also common unrecognized extensions.**

UNEXPECTED outgrowths of tumor tissue, invisible to gross inspection, are very common with radioresistant skin cancers because repeated courses of irradiation may eradicate the superficial portion of the cancer but allow the deeper part to spread undetected. In addition, the malignant potential of the growth may be augmented by repeated irradiation. Thin sheets of cancer tend to extend for great distances either irregularly or specifically along the dermis, fascial planes, periosteum, perichondrium, embryologic fusion planes, nerve sheaths, and lymphatic or blood vessels. Prediction of tumor extension is impossible.

The chemosurgical procedure is a specialized method that requires personnel trained in operative technique and in interpretation of the microscopic sections. However, results are excellent when facilities are available.

A nontoxic zinc-chloride paste is used for fixation of tissues *in situ*. The chemical has no tendency to

increase the incidence of metastases; in fact, the opposite is probably true. First, the main tumor mass is excised under local anesthesia or after application of a generous amount of the paste. The paste is then applied to the raw tissue below the main mass in an amount sufficient to penetrate 2 or 3 mm. of tissue. Several hours later, this layer of fixed tissue is removed without causing pain or bleeding.

The slice is divided into 6 portions, and frozen sections are made of the undersurface of each piece. Areas showing tumor extension are marked on a map corresponding to the lesion. Reapplication of the paste is confined to the cancerous areas of the wound. A deeper slice is then made in the malignant areas, and the process is repeated until a microscopically verified tumor-free plane is reached. The final layer of fixed tissues separates in a week, and the lesion heals rapidly, forming a soft, smooth scar of surprisingly good appearance.

Cancer of the nose, particularly of the nasolabial fold, often sends out small-caliber extensions in an unpredictable manner along the embryologic fusion plane. Bone and cartilage may deflect the extensions. Chemosurgical removal allows each extension to be selectively traced

*The chemosurgical method for the microscopically controlled excision of radioresistant facial cancer. Am. J. Roentgenol. 73:61-69, 1955.

and also preserves the uninvolved tissues.

Cancer of the ear rapidly reaches the cartilage and then spreads along the perichondrium; the cartilage usually is not penetrated until the neoplasm is in an advanced stage. All tissue down to the cartilage should be excised, and fixation is done peripherally until noncancerous sections are obtained. A layer of cartilage is removed with the final excision.

Cancer of the eyelid, especially when the inner canthus is involved, is often a difficult therapeutic problem because many lesions spread rather deeply along the periosteum of the medial wall of the orbit. Fortunately, a chemosurgical excision usually spares the eyeball, provided the sclera is not involved.

Cancer of the nonorificial por-

tions of the face usually react well to radiation. However, in the case of recurrence, many of the highly invasive basal-cell carcinomas of the forehead, temples, or scalp have a strong tendency to extend peripherally for great distances without gross changes. Such metastases, even when extensive, are readily removed by the chemosurgical technique.

Squamous-cell carcinoma of the lip occasionally recurs after surgical excision and radiation therapy. Tumor may extend into the submucosa at the periphery, along the anterior or posterior surface of the orbicularis oris muscle, or along nerve sheaths to the mental foramen. If lymph nodes are involved, a surgical neck dissection is done after chemosurgical removal of the lip lesion.

Asymptomatic Bronchogenic Carcinoma

ROBERT P. MC BURNAY, M.D., JOHN W. KIRKLIN, M.D., AND ROBERT T. HOOD, M.D., MAYO CLINIC AND FOUNDATION, ROCHESTER, MINN., report that the prognosis for asymptomatic bronchogenic carcinoma is better than that for bronchogenic carcinoma in general because of the high resectability rate of the asymptomatic lesion.

Silent bronchial carcinoma is usually discovered by routine chest roentgenograms; well-circumscribed and rounded nodular densities are the most common findings. Physical examination and bronchoscopic and cytologic studies are usually negative. Occasionally, rales or diminished breath sounds are heard over the involved area. Exploratory thoracotomy is usually necessary to confirm the diagnosis.

In 29 patients with asymptomatic bronchogenic carcinoma, lesions were usually located peripherally or in the midpulmonary fields. Hilar lymph node metastases were observed in 11 patients. Adenocarcinoma and large-cell carcinoma were the predominant histologic types. Resection was done in all of the patients, but 14 died within three years after operation.

Asymptomatic bronchogenic carcinoma. Ann. Surg. 141:84-86, 1955.

Surgery for Arterial Occlusive Disease

JOSEPHUS C. LUKE, M.D.

Royal Victoria Hospital, Montreal

*If criteria for operation are rigidly observed, surgery often relieves segmental occlusion of major arteries.**

COMPLETE occlusion of the lower aorta may occur as early as 40 years of age. In relatively young patients with arterial occlusive disease, the intima is affected by the degenerative process with little or no medial degeneration or calcification. Although the diagnosis can usually be made clinically, arteriographic visualization is needed for confirmation.

The site of occlusion will determine the level of intermittent claudication. Blockade of the superficial femoral artery with a functioning profunda femoris artery results in calf claudication. Segmental occlusion in the external or common iliac artery provokes claudication pain in the posterolateral thigh and buttock. When the lower aorta and both common iliac vessels are involved, claudication appears as severe heaviness and semiparalysis of the legs, with pain in the thighs, buttocks, and low back area.

Skin temperature is generally reduced, but the affected limbs appear normal. Palpation occasionally reveals a faint dorsalis pedis or posterior tibial pulsation. With superficial femoral segmental occlusion,

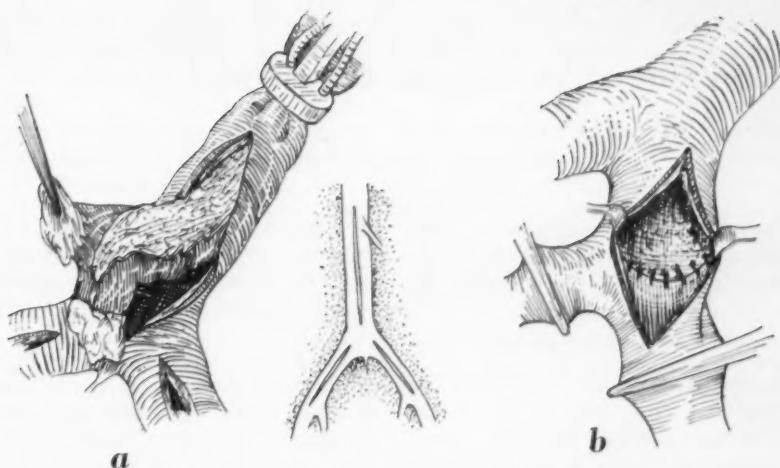
the common femoral pulsation is unchanged. With aortic or common iliac obstruction little or no common femoral pulse can be detected. Oscillometric readings are uniformly reduced.

Other evidence of generalized arteriosclerosis is ordinarily apparent by ophthalmoscopic examination or electrocardiogram. The limb is in no immediate danger from acute ischemia because the process of occlusion is slow, and collateral circulation is adequate.

Normal blood flow through an occluded segment can be restored by thromboendarterectomy or by resection with replacement by a blood vessel graft. Thromboendarterectomy consists of isolating the diseased portion of the vessel between noncrushing clamps, longitudinal incision of the segment, and excision of the organized thrombus and intima (Fig. a). A plane of cleavage between the diseased intima and the media makes the dissection possible. The distal end of intima must be sutured to the media to prevent inward valvelike folding of the cuff (Fig. b). Suture of the tube of adventitia and media concludes the procedure.

Thromboendarterectomy is advocated for occlusive disease of the lower aorta and common iliac arteries unless a significant amount of

*Management of segmental occlusion of major arteries. *Geriatrics* 10:5-11, 1955.



calcification has been demonstrated by roentgenogram. If arteriographic examination reveals that the segmental block is associated with considerable arteriosclerotic variations in size of the lumen, either proximal or distal, surgery is not advised. Partial occlusion is insufficient reason for operation because a poor surgical result leaves the patient in worse condition than before.

Autogenous vein grafts are used primarily for replacement when resection of the superficial femoral artery has been done. Vein grafts should be smaller in diameter than the arterial segment to be bridged because of an initial ballooning which increases the likelihood of thrombosis within the graft. Homografts are better suited for replacing segments of large arteries.

TRAUMATIC AORTIC ANEURYSMS, resulting from severe, nonpenetrating injuries of the thorax, and unaccompanied by rib fracture or obvious bruising, may be diagnosed roentgenographically. The aneurysms usually appear in the first portion of the descending aorta or, less commonly, in the proximal ascending aorta. Early films show only widening and obscuration of the arch, but aneurysmal dilatation is eventually discernible. Progressive enlargement or symptoms may necessitate surgical repair. If all layers of the arterial wall cannot be sutured, Col. Edwin M. Goyette, M.C., U.S.A., and associates of Fitzsimons Army Hospital and the University of Colorado, Denver, advocate excision of the sac and homologous grafting. Sutures should be placed in good aortic tissue rather than in the sac wall to prevent rupture.

Circulation 10:824-828, 1954.

The Shoulder Girdle Syndrome

JERE W. LORD, JR., M.D.

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*Surgery for the shoulder girdle syndrome should be employed cautiously as results of operation are often poor.**

COMPRESSION of the subclavian artery and vein and portions of the brachial plexus produces many symptoms referable to the upper extremity. The severity of disability depends upon such contributing factors as posture and muscular hypertrophy. A cervical rib may further disturb function.

Although similar in symptomatology, 4 syndromes may be distinguished:

Cervical rib syndrome—Compression of the neurovascular structures between the cervical rib and the scalenus anticus muscle may produce partial ulnar paralysis and impairment of arterial flow. The cervical rib is best demonstrated by roentgenogram. All cervical ribs, however, may not give rise to this syndrome.

Scalenus anticus syndrome—This symptom complex is caused by pressure of the scalenus anticus muscle on the neurovascular structures. In most instances, the symptoms are neurologic. The syndrome is best demonstrated by adduction of the arm to the body with observation of the radial pulse. The pulse is

not perceptible on adduction but reappears when the arm is elevated to 90°. Resection of the scalenus anticus muscle will frequently give relief.

Costoclavicular syndrome—Compression of the clavicle on the subclavian artery produces signs and symptoms of arterial insufficiency. This syndrome is best demonstrated by the patient's standing erect and thrusting the shoulder back and downward. Obliteration of the radial pulse implicates the narrowed costoclavicular space. Thrombosis of the subclavian artery may occur in later years.

Hyperabduction syndrome—In about one-third of healthy persons, the radial pulse becomes weaker for a short time when the arms are elevated above the head and then moderates. In some patients, however, the pulse is not felt as long as the arms are hyperabducted. Symptoms are caused by ischemia of the arms. Maneuvers requiring elevation of the arms should be avoided and habits such as sleeping with the arms over the head should be broken. Surgical division of the pectoralis minor muscle usually gives the patient permanent relief from disability.

Conservative measures alleviate the ischemic symptoms of the upper extremities in 90% of persons

*The shoulder girdle syndrome. Maryland J. M. 3:352-362, 1954.

with these syndromes. In patients with complete intraarterial thrombosis caused by repeated arterial occlusion, however, gratifying results have been obtained by surgery that removes all points of pressure upon arteries and nerves.

The operative procedure consists of subperiosteal exposure and removal of the entire clavicle. The periosteum also must be removed to avoid regeneration. Compression is eliminated in the scalenus anticus region and also between the clavicle

and first rib. The shoulder is allowed to fall forward and relax the tension on the artery.

The procedure was performed in 13 patients with good results when the symptoms were caused by arterial involvement. Surgery was not beneficial in 1 patient whose symptoms were primarily neurologic. The only disability from the operative procedure occurred in 2 heavily muscled men who noted aches and fatigue in the pectoralis major muscle.

Pancreatic Duct Hyperplasia and Cancer

SHELDON C. SOMMERS, M.D., SALLY A. MURPHY, AND SHIELDS WARREN, M.D., NEW ENGLAND DEACONESS AND MASSACHUSETTS MEMORIAL HOSPITALS AND HARVARD UNIVERSITY, BOSTON, AND PONDVILLE HOSPITAL, WALPOLE, MASS., suggest that hyperplasia and carcinoma of the pancreatic duct may be related to each other etiologically.

Papillary or adenomatous hyperplasia was associated with 41% of 141 cases of pancreatic cancer reviewed after death. Postmortem studies of 100 patients without cancer revealed only a 9% incidence of cell overgrowth. Hyperplasia was observed near the edges of the carcinomatous tissue most frequently but sometimes was diffuse throughout the entire organ. Squamous metaplasia, mucus-producing goblet cells, and ciliated cells were not observed in the hyperplastic process. Intraductal papillomas may become malignant and invasive in the pancreas, as in the breast.

Diabetes evidently increases danger of pancreatic carcinoma; duct hyperplasia was noted post mortem in 28% of 100 instances of diabetes.

Incidence of pancreatic duct hyperplasia with rectosigmoid carcinoma in males is unusually high. Parts of the gastrointestinal tract and embryologic derivatives probably respond concomitantly to unidentified carcinogenic stimuli. When duct hyperplasia and multiple primary cancer occur together, the neoplastic disease frequently involves the endocrine-stimulated organs and gastrointestinal tract. The disturbances are probably caused by a generalized endocrine imbalance or constitutional factor.

Pancreatic duct hyperplasia and cancer. *Gastroenterology* 27:629-640, 1954.

Surgery for Hypopharyngeal Cancer

RONALD W. RAVEN, O.B.E.,
Royal Cancer Hospital, London

*Operation relieves symptoms arising from carcinoma of the hypopharynx and may afford permanent benefits.**

RADICAL surgery may be the only effective form of therapy for hypopharyngeal carcinoma. Full assessment of operability is mandatory before surgery, however, and radical operation should not be attempted unless definite benefit is possible.

When the hypopharynx is fixed with lateral extensions into the neck and lymph nodes are immobile and hard, radical surgery should not be done, but if regional lymph nodes are mobile, a satisfactory result is possible despite metastases. Surgery may be done if the lesion reaches the root of the tongue but is not performed if the cancer extends high into the wall of the oro- or naso-pharynx. Anterior extension into the larynx and trachea does not preclude radical surgery.

Before operation, tracheotomy should be avoided because of the danger of infection. Direct pharyngoscopic and laryngoscopic examinations should be reserved for the operating room where biopsy and histologic examination can be done immediately before the contemplated surgery.

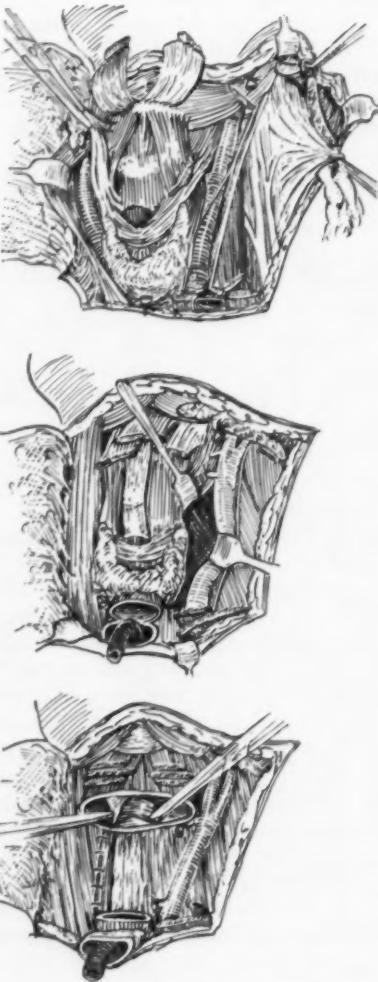


Fig. 1. Steps in resection

*The surgical treatment of carcinoma of the hypopharynx. *Brit. J. Surg.* 42:113-122, 1954.

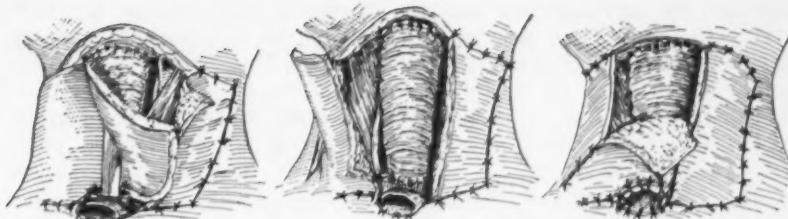


Fig. 2. Reconstruction of the pharynx and esophagus

TECHNIC

The usual operation is a 2-stage procedure consisting of laryngopharyngectomy or laryngoesophagopharyngectomy (Fig. 1) during the first stage and reconstruction of the pharynx and esophagus (Fig. 2) during the second stage.

A quadrilateral skin flap is made with the upper horizontal incision crossing the neck from the anterior border of the sternomastoid to the posterior border of the opposite sternomastoid at the level of the hyoid bone. The lower horizontal incision crosses $\frac{1}{2}$ in. above the suprasternal notch from the clavicular head of the sternomastoid to the level of the midpoint of the clavicle. A vertical connecting incision is made, and the flap is reflected from the platysma to the anterior border of the sternomastoid.

The larynx and hypopharynx, and the cervical esophagus when necessary, are removed with the regional lymph nodes as a monoblock operation. The deep cervical lymph nodes around the internal jugular vein, the prelaryngeal and pretracheal lymph nodes, and the lymph nodes around the recurrent laryngeal nerves should be removed. The internal jugular vein, sternomastoid muscle, and posterior belly of the

digastric muscle also may require resection.

With high growths, the hyoid bone is removed and the cervical esophagus, when affected, is divided at the thoracic inlet. If possible 2.5 cm. of healthy tissue should separate the line of section from the macroscopic edge of the growth. The thyroid gland is removed if the lateral lobes are invaded.

The trachea is divided between the second and third rings when the lesion is high and between the third and fourth rings if low. The anterior rim of the tracheostomy is fixed to the skin by interrupted nylon sutures.

The quadrilateral skin flap is laid over the prevertebral tissues and the posterior wall of the esophagus is attached to the lower border with alternating interrupted sutures of fine nylon and catgut. Similarly, the posterior wall of the divided hypopharynx is sutured to the upper border of the skin flap. The skin flap is turned on itself to make a tube, the anterior wall of the esophagus is sutured to the lower border, and the anterior wall of the hypopharynx to the upper border. A tube is passed through the esophagostomy into the stomach for feeding.

At the second stage of recon-

struction, the lateral cervical fistula is closed to form a new skin hypopharynx. This is covered by a rotation skin flap from the lateral aspect of the neck. Raw areas in the neck are covered with split-thickness skin from the thigh.

When hypopharyngeal carcinomas have been unsuccessfully treated by radiation, technical operative difficulties may be obviated by conservation of a strip of the posterior

pharyngeal wall, bilateral acromiopleural tubed pedicled grafts, or use of a narrow quadrilateral skin flap.

Occasionally, 1-stage operations with primary closure of the pharynx are possible. Laryngo-partial pharyngectomy, laryngopharyngectomy with end-to-end anastomosis, partial pharyngectomy with conservation of the larynx, and resection of the hypopharynx with conservation of the larynx have been used.

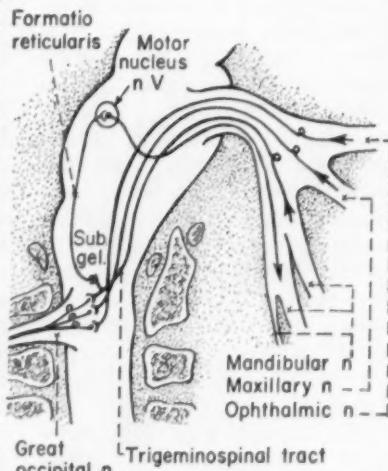
Great Occipital-Trigeminus Syndrome

P. G. SKILLERN, M.D., SOUTH BEND, INDIANA, believes that a functioning contact exists between the great occipital nerve and the trigeminus (see illustration).

Alcohol block of the great occipital nerve relieves symptoms [1] confined to the distribution of the great occipital nerve, [2] shared by the trigeminal nerve, or [3] shown by the trigeminus alone. Relief persists for at least six to twelve months and is more often than not permanent.

The most common manifestations of great occipital neuritis alone are wincing over the nerve, stiff neck, and pains from neck to coronal suture, caused or made worse by exposure to draft and produced by combing or brushing hair. With the great occipital-trigeminus syndrome, impulses radiate from the occipital nerve to the ophthalmic, maxillary, and mandibular divisions of the trigeminal nerve. Occasionally, symptoms are manifested by the trigeminus alone, as a result of passive stimulation by the occipital nerve. Symptoms of zoster ophthalmicus may be noted or painful spasm of the lateral pterygoid muscle may occur.

Great occipital-trigeminus syndrome as revealed by induction of block. *Arch. Neurol. & Psychiat.* 72:335-340, 1954.



Early Diagnosis of Spinal Tumors

H. J. G. BLOOM, M.D., H. ELLIS, B.M., AND W. B. JENNETT, M.B.
Military Hospital for Head Injuries, Wheatley, England

*Surgical therapy for spinal tumor may be curative if diagnosis is made before irreversible pressure changes occur.**

BECAUSE of the location of most primary spinal tumors, symptoms are usually gradual in onset, appearing several months before physical signs. The course is much more rapid with secondary growths, and paraplegia may be noted within days after appearance of the first symptoms.

Pain occurs in approximately 80% of patients, but temporary remissions, especially with cauda equina tumors, are not uncommon. Root pain may be aching or lancinating and is referred to the dermatome. Straining or coughing often aggravates the discomfort. A dull central backache that persists in spite of rest may also be noted. Other disturbances of sensation may include numbness, burning, or tingling.

Power loss may take place initially, particularly with intramedullary tumors, but usually occurs some time after sensory disturbances. Loss of sphincter control is a late manifestation.

Physical signs, such as a stiff spine, scoliosis, or erector spinae spasm, should be investigated. The

effects of straight leg-raising and of jugular compression are tested. Sensory loss, weakness, wasting, and reflex changes may aid localization of the lesion. Occasionally, no physical signs can be elicited, even though a tumor is found.

In slightly less than half of patients, plain spinal roentgenograms may reveal such changes as gross vertebral destruction, pedicle and lamina erosion, widening of the intervertebral foramina, and posterior scalloping of the vertebral bodies. Myelographic examination is valuable for final localization or for excluding neoplasm in suspicious cases.

A lumbar puncture will reveal some abnormality in almost every case and should not be withheld except with rapidly progressive disease or when cervical cord tumor is suspected. A partial or complete manometric block, determined after light and firm neck compression, is noted in about three-quarters of the individuals. Xanthochromia of the cerebrospinal fluid is found in slightly over half of patients, and the protein content is increased in all. A slight increase of cells is occasionally noted, but this finding does not aid determination of the type of lesion.

Several conditions may be confused with spinal tumor. Every ef-

*The early diagnosis of spinal tumors. *Brit. M. J.* 4904:10-16, 1955.

fort should be made to differentiate prolapsed intervertebral disk, neuritis, disseminated sclerosis, and visceral disease within the chest and abdomen.

Laminectomy is performed as soon as the definite diagnosis and

localization are established. Most neurofibromas can be totally removed with complete recovery, while other tumors can be only partially excised or decompressed. These should be treated with radiation postoperatively.

Electrolyte Therapy for Uremia

RICHARD A. NEUBAUER, M.D., AND LILLIAN DUNSMORE, M.D., MEMORIAL HOSPITAL, WILMINGTON, DEL., note that, when electrolyte therapy is given to patients with uremia and acidosis caused by intrinsic renal disease, symptoms are alleviated and chemical levels often improve.

Electrolyte therapy is instituted when [1] prolonged drainage does not reduce the blood urea nitrogen level sufficiently for safe surgery, [2] uremia is progressive in spite of therapy, or [3] drainage results in only slow improvement, and the hospitalization period may be shortened by correction in the chemical status and relief of symptoms.

Therapy consists of 120 to 240 mEq. daily of oral or intravenous hypertonic sodium lactate in a 1- or 0.5-molar solution and 4 to 8 gm. of calcium gluconate given by vein or mouth in a 10% suspension of calcium lactate in Amphojel. Occasionally, 20 to 80 mEq. of potassium acetate is given orally as a 1-molar solution or intravenously as potassium chloride. The 1-molar sodium lactate solution is used if edema is noted or if cardiac embarrassment is suspected. Fluid intake is maintained at 2,500 to 3,000 cc. every twenty-four hours. All treatment is administered intravenously to comatose patients.

Blood urea nitrogen, carbon-dioxide combining power, sodium, potassium, and chloride values are determined daily or every other day. Sodium, potassium, and chloride in the urine are measured each day. Patients are weighed each morning. The blood pressure is recorded twice a day and every twenty minutes when hypertonic intravenous solutions are administered.

Practically all patients show a drop in blood urea nitrogen, and slightly over half of the individuals react well within two weeks or less.

Hypertension is not aggravated and pulmonary edema is not produced during electrolyte therapy.

Electrolyte therapy in the control of uremia: with special reference to postobstructive uremia. *J. Urol.* 72:1074-1081, 1954.

Management of Backache

FREDERIC J. KOTTKE, M.D.

University of Minnesota, Minneapolis

*Adequate therapy for low back pain depends on an understanding of the physiologic mechanisms.**

INJURY to deep muscles or connective tissue of the low back causes a protective muscular spasm, or splinting, that immobilizes the back, increases tension on intervertebral disks and joints, increases the metabolism of back muscles, and causes fatigue and accumulation of metabolites in the continuously active muscles. Each of these responses produces pain in the muscles and joints, causing a secondary reflex action that aggravates the initial muscular splinting. Assessment of the initial injury is impossible until the reflex-guarding reaction is relieved.

Therapy should be directed at [1] protection of the injured area to prevent progressive injury; [2] analgesia; [3] promotion of healing; [4] interruption of the cycle of secondary muscular splinting; and [5] maintenance or reestablishment of mobility.

Severe pain with muscle spasm and limited back motion should be treated with the patient in bed with traction. A pelvic traction belt and 16 to 20 lb. of weight provides comfortable immobilization and support of the lumbar spine. The foot

of the bed is elevated 4 to 6 in. to provide countertraction to the weight of the body.

Adhesive taping gives necessary support to less severe back injuries. To decrease irritation, tincture of benzoin is first applied to the skin and allowed to dry. An overlapping layer of 2-in. tape is then applied from the level of the buttock crease to the tenth thoracic spine. A diagonal cross of tape is placed to give lateral stability and then a second transverse layer is applied.

Pain may be relieved by heat, diathermy, Kenny-type hot packs, and massage. With localized injury or trigger pain point, 1% procaine hydrochloride infiltration will interrupt the cycle of muscular splinting, allowing the patient to move without discomfort for several hours.

Restriction of movement for only a few days causes a progressive decrease in the range of motion. If fibrous contractures are allowed to occur, limitation of motion may be permanent. To maintain mobility, the muscles of the back and hips should be stretched to full resting length once or twice daily.

Acute tenderness over one sacroiliac joint may be noted after a twisting movement of the trunk. Straight leg raising is restricted. Manipulation often relieves the condition immediately.

*Measures that have proved helpful in backache. J.A.M.A. 156:808-810, 1954.

Postneurosurgical Alimentary Bleeding

RICHARD A. DAVIS, M.D., NICHOLAS WETZEL, M.D.,
AND LOYAL DAVIS, M.D.

Northwestern University, Chicago

*Postoperative gastrointestinal ulceration and hemorrhage are probably the result of metabolic response to stress rather than of central nervous system lesions.**

DISEASE of the central nervous system and postneurosurgical massive bleeding of the alimentary tract are evidently not significantly correlated. Lesions of the hypothalamus or diencephalon do not seem to cause the gastrointestinal complications.

Incidence of upper gastrointestinal ulceration and bleeding after neurosurgery is only 0.7%. Severe hematemesis may occur after laminectomy or trigeminal neurectomy when the central nervous system is not diseased. Also, alimentary ulcers and bleeding may accompany infections, trauma, cerebrovascular accidents, congenital deformities, intracranial tumors, or neurosurgical diagnostic procedures.

Of 48 neurosurgical patients with postoperative ulceration and bleeding, only 4 had lesions of the hypothalamus or diencephalic area. The frontal lobe was involved most often. Gastrointestinal disturbances did not occur in 15 cats after destructive hypothalamic lesions were made.

*Acute upper alimentary tract ulceration and hemorrhage following neurosurgical operations. Surg., Gynec. & Obst. 100:51-58, 1955.

Patients with severe gastrointestinal bleeding after neurosurgery have extreme shock, anemia, and hyperthermia. Slight hematemesis may occur during the first postoperative day and is an unfavorable prognostic sign, though some patients may not have recurrences. Mortality is about 25%. Death usually occurs during the first forty-eight postoperative hours, but symptoms may be delayed as long as six to eight days.

Among patients with preoperative gastrointestinal symptoms, neurosurgery reactivates the disease. Hematemesis is likely to be severe and is often fatal.

Gastrointestinal hemorrhage and ulceration may be an extreme pathophysiological reaction to stress of surgery. ACTH, cortisone, and the stress of a surgical procedure increase the secretion of hydrochloric acid and pepsin.

After a prolonged neurosurgical procedure, the hypothalamus may stimulate the anterior pituitary to produce ACTH. The adrenal cortex is activated and adrenal corticoids stimulate parietal cells and peptic glands. The hypothalamus probably affects the pituitary-adrenal cortex balance but a lesion need not be involved.



SPECIAL EXHIBIT

BEHÇET'S SYNDROME

HELEN O. CURTH, M.D.

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● Behçet's syndrome (aphthosis) is a disease of relatively young people. About 50 cases have been reported which duplicate exactly Behçet's original description of the syndrome. Many other patients, however, have been observed with only 2 of the 3 classic manifestations, and recurrent symptoms are sometimes seen in parts of the body other than the eyes, mouth, and genitals.

A Modern Medicine Exhibit adapted from a presentation made at the Seventeenth International Congress of Ophthalmology in New York City.

Description and Statistics

Behçet's syndrome is defined as recurrent attacks of

HISTORY

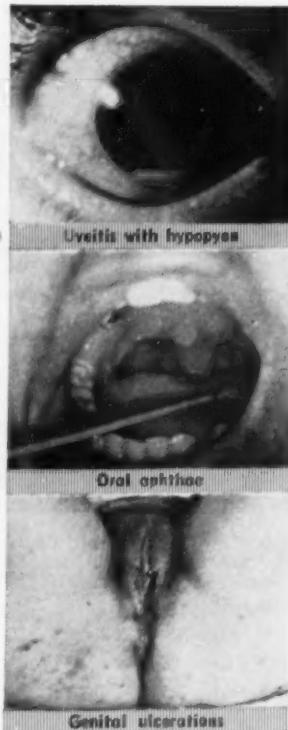
Behçet in Turkey in 1937 first recognized the interrelationship between the characteristic manifestations in the 3 organs, but he was not the first to observe the triad in a patient. Such cases were reported by Blüthe in Germany in 1908, Adamantiades in Greece in 1930, Dascalopoulos in Greece in 1932, and Whitwell in Great Britain in 1934.

ORIGIN

Up to 1948, the disease was seen principally in Mediterranean countries, but cases have now been reported from all parts of the world.

INTERVALS

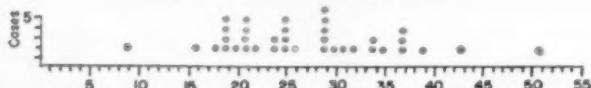
Recurrent attacks in one organ may be weeks, months, or years apart. Lesions may appear simultaneously in 2 or all 3 organs or intervals between attacks in the different organs may range from days to years.



SEQUENCE OF MANIFESTATIONS

The disease begins most frequently in the mouth, in the eyes, or in the mouth and on the genitals simultaneously and less frequently in all 3 locations at the same time.

AGE AT ONSET OF FIRST SIGN



SPECIAL EXHIBIT

Abortive Forms

Some patients have only 2 of the 3 classic signs

MOUTH AND GENITALS	This is by far the largest group. In an overwhelming majority, lesions appear first in the mouth and subsequently on the genitals. MALES, 31% FEMALES, 69%
EYES AND MOUTH	Signs appeared first in the eyes.....75% Lesions appeared first in the mouth.....25% MALES, 87% FEMALES, 13%
EYES AND GENITALS	Signs appeared first in the eyes.....50% Lesions appeared first on the genitals.....25% First appearance unreported.....25% MALES, 75% FEMALES, 25%

AGE AT ONSET OF FIRST SIGN



A few patients have only 1 recurrent manifestation

MOUTH	A relatively frequent occurrence in both men and women
GENITALS	More frequent in women than in men
EYES	Occurs in both men and women

Ocular Manifestations

Recurrent uveitis (iritis or iridocyclitis) with hypopyon

Both eyes involved, although not in every attack

SYMPTOMS: Intense periorbital pain and photophobia

CLINICAL PICTURE: Recurrent conjunctivitis may precede uveitis for years.

Slight pericorneal reaction; precipitations occur on posterior surface of cornea.

Iritis and iridocyclitis develop later.

Hypopyon is a late sign.



Enucleated eye

COURSE: The hypopyon tends to disappear quickly, but the vitreous clears slowly and incompletely. Hemorrhages occur in the vitreous and in front and back of the detached retina. The iris and choroid are infiltrated. Posterior ring abscesses may be observed, and posterior synechia are usually seen. Every attack diminishes the remaining vision. Neuroretinitis and optic atrophy ensue, and the end result is blindness in both eyes.

Oral Manifestations

Recurrent oral aphthae

LOCATION: Lip, tongue, buccal mucosa, soft and hard palate, tonsils, pharynx, and larynx may be involved. Lesions are tender, single or multiple, pinhead to pea-sized or larger, and sharply circumscribed erosions or ulcerations with a dirty base and surrounding halo.

HISTOLOGY: Destruction and infiltration of epithelium occur. Blood vessels increase in number and have thickened and edematous walls.

The corium is edematous in portions adjacent to ulceration. Many large zones of infiltration with inflammatory round and polymorphonuclear cells are seen.



Oral ulcer

COURSE: The lesion tends to heal spontaneously in days or weeks, but new lesions recur at different sites. Regional glands may be involved.

Genital Manifestations

Recurrent ulcerations

LOCATION: In the male, the scrotum, penis, urethral orifice, perineum, anus, and, very rarely, the urethra may be involved. In the female, the vulva (small and big labia and clitoris), vagina, cervix, anus, rectum, and perineum may be involved.

CLINICAL PICTURE: The ulcerations are tender, single or multiple, round or oval, and sharply circumscribed, with a flat or granulated base covered with grayish exudate. Borders are sharp, not undermined. Scars or fenestration and, especially in women, severe destruction may result.

COURSE: Ephemeral blister or bulla with necrosis progresses to an ulcerative stage. Fever and chills and, in women, cervical discharge may initiate an attack. The regional lymph nodes may be involved. The lesion heals with or without therapy, but new lesions recur at different sites. The whole process takes about three to thirty days.

Associated Recurrent Signs

Seen in other parts of the body in a large percentage of cases

CUTANEOUS:

Erythema nodosum, relatively frequent:

hyperkeratosis, flattened epidermis

vasculitis with thrombosis and hemorrhage in surrounding connective tissue, particularly in middle and lower corium

cellular infiltration of corium and subcutaneous layers, resulting in fat replacement atrophy

Cutaneous hypersensitivity: Pustules or even ulcerations may develop from needle pricks or injections, whether sterile or not.

Furunculosis, acne, folliculitis, and papular and erythematous eruptions

OTHERS:

Muscle and joint: fibrositis, myositis, tendovaginitis, arthritis, hydrarthrus.

Vascular: thrombophlebitis of extremities and inferior vena cava. *Gastrointestinal:* colitis, ileitis, appendicitis. *Nervous:* headaches; giddy turns; euphoria; mental deterioration; slurred speech; ataxia; paralysis of third, fourth, or sixth cranial nerves; nystagmus; positive Babinski (simulating multiple sclerosis); cerebral involvement with death.



SPECIAL EXHIBIT

Miscellaneous Findings

Special Investigations

SMEARS: Staphylococci, streptococci, and *Bacillus crassus*
 CULTURES: Sterile, *Staphylococcus aureus*, green and nonhemolytic streptococci, *Corynebacterium pseudodiphtheriticum*
 BLOOD CULTURES: Sterile, occasionally *Staph. albus* and *B. crassus*
 VIRUS STUDIES: Negative except those reported by Behcet and Sezer
 BLOOD TESTS: Negative Wassermann
 CUTANEOUS TESTS: Mostly negative
 ANIMAL INOCULATION: Usually negative
 AUTOINOCULATION: Usually negative
 BIOPSY: Pronounced changes of small vessels of upper and lower corium apparently characteristic
 SPINAL FLUID: Normal except in cases with CNS involvement
 WBC: Normal or slight leukocytosis
 SEDIMENTATION RATE: May be elevated
 BMR: Normal
 URINALYSIS: Normal
 ANTIBODIES: Against a virus (Sezer)

Theories have been offered that the disease may be

of virus origin
 due to a focal infection in the body
 a peculiar response to repeated trauma
 a virus-pyogen correlation
 a manifestation of allergy to an unidentified virus or to staphylococcus
 basically vascular, the ulceration secondary a collagen disease

Therapy

No known cure
 Transfusions of whole blood helpful
 Antibiotics disappointing
 Caution with ACTH and cortisone

Differential

DISEASE	SEX, AGE, RACE
BEHCET'S SYNDROME	Young men and women
PEMPHIGUS VULGARIS	Middle-aged men and women, mostly Jewish
OCULAR PEMPHIGUS (essential shrinkage of the conjunctiva)	Young, middle-aged, or old persons; women affected more than men; nonJewish
STEVENS-JOHNSON'S SYNDROME	Children and young men and women
ERYTHEMA MULTIFORME (recurrent)	Children and young men and women
REITER'S SYNDROME	Young men only

SPECIAL EXHIBIT

Diagnosis of Mucocutaneous and Ocular Syndromes

CHARACTER	EYES	MOUTH	GENITALS	SKIN
Recurrent; benign(?) but leading to blindness	Recurrent uveitis with hypopyon leading to blindness	Recurrent, discrete aphthous lesions	Recurrent scrotal and vulvar ulcerations	Occasional erythema nodosum, folliculitis, papules, widespread ulcerations, and others
Progressive, with remissions; fatal without cortisone	Conjunctivitis in a high percentage of cases; confluent erosions of palpebral, conjunctivae involving the ciliary border	Widespread confluent blisters, remnants of bullae, or confluent irregular erosions; superficial membranes easily wiped from gums	Involvement does not differ from that of skin and mucous membranes	Bullae
Chronic; benign but leading to scarring with blindness	Shrinking of conjunctiva and drying of cornea in one or both eyes leading to blindness	Blisters, ordinarily healing without scarring; vermillion border not involved	Occasional blisters, healing with or without scarring and adhesions	Blisters, healing with or without scarring; nail beds and nails may be involved
Rarely recurrent; acute; febrile; occasionally fatal; pulmonary involvement in 25% of cases	Small, round, hemorrhagic lesions on ciliary margin; purulent conjunctivitis (danger of panophthalmia)	Painful blisters and stomatitis	Involvement similar to that of skin and mucous membranes; occasional phimosis and urethritis	Profuse blisters, pustules, and crusted lesions; occasionally erythema nodosum
Recurrent; acute or subacute; benign	Conjunctivitis and edema of lids; small round lesions not involving ciliary margin heal with scarring	White, sloughing patches	Involvement similar to that of skin and mucous membranes	Herpes iris lesions, especially on extremities
May be recurrent; acute or subacute; usually benign; arthritis is a cardinal sign	Conjunctivitis	Lips may show typical skin lesions	Nongonorrheic urethritis; penis may show typical lesions	Primarily pustules undergoing hyperkeratotic changes

Intractable Pruritus Vulvae

WALTER J. REICH, M.D., AND MITCHELL J. NECHTOW, M.D.
Cook County Graduate School, Chicago

*Anesthetic oils may be employed to control refractory pruritus vulvae.**

INTENSE itching of the vulva may be accompanied by slight to moderate excoriations of the skin, redness, folliculitis, or fissures. With severe conditions, concomitant pruritus ani is not uncommon. Specific causes such as *Trichomonas*, *Monilia*, kraurosis, leukoplakia, ulcerations, dermatologic disorders, and systemic and metabolic conditions should be excluded before the condition is classified as intractable. Psychogenic etiology should also be considered.

Good therapeutic results may be obtained with Zylcaine, a preparation containing 1½% procaine, 6% Butesin, 5% benzyl alcohol, and peanut oil. The pubic hair is not shaved, and a liquid detergent, 1 part to 3 parts of warm water, or soap and water is used to wash the vulva.

To eliminate pain when the oil mixture is injected, 4 wheals of 1% procaine are first made with a 27-gauge hypodermic needle; 2 to 3 cc. more procaine is injected through the wheals into the subcutaneous parts of the labia on both sides. A 20-cc. syringe with a 19- or 20-gauge spinal needle is filled with

slightly warmed Zylcaine. Beginning at the top, the needle is thrust along the labia to the lower pole and Zylcaine is injected as the syringe is withdrawn.

From 5 to 10 cc. of Zylcaine is used for each labium, depending on size and consistency; the amount is increased 2.5 to 5 cc. for the supraclitoric and rectovaginal areas. The injection is kept well beneath the skin to avoid slough.

The procedure may be done without assistance in the office or outpatient clinic. If the patient is apprehensive, intravenous anesthesia may be given; a day in the hospital also may be advisable for these patients.

The texture and consistency of the labia return to normal within four weeks after the injection. Skin overlying the vulva is only temporarily anesthetized. Because of an occasional allergic reaction to peanut oil, a patch test for sensitivity is recommended. A drop of oil is placed on the upper arm, covered with an adhesive bandage and examined for redness in twenty-four hours. If a reaction occurs, anesthetic oil with different constituents may be used.

Zylcaine therapy was used in 228 patients between the ages of 28 and 72. The duration of symptoms

*A ten-year study of treatment and its results in intractable pruritus vulvae. Am. J. Obst. & Gynec. 69:94-100, 1955.

ranged from six months to twenty-two years.

Pruritus was relieved or cured in 210 of the patients; 19 required 2 injections and 4 required 3. Of the 18 patients unimproved after 3 injections, 6 had had previous roent-

gen treatments which caused sclerosis and lichenification of the skin and 12 had neuroses.

Cessation of symptoms was apparently the result of foreign body reaction to the oil with resultant nerve compression.

Atypical Hyperplasia of Uterine Cervix

JAMES W. REAGAN, M.D., DOROTHY J. HICKS, M.D., AND ROGER B. SCOTT, M.D., WESTERN RESERVE UNIVERSITY, CLEVELAND, AND UNIVERSITY HOSPITALS OF CLEVELAND, report that atypical hyperplasia may be a sign of future cervical carcinoma.

An increase in the number of immature cells comprising the epithelium is the chief change with uterine cervical atypical hyperplasia. Parakeratosis or hyperkeratosis is frequently associated. The altered tissue can differentiate along the lines of normal stratified epithelium. Intercellular bridges persist in the superficial layers but may be indistinct in basal layers. The cellular elements are usually polyhedral in upper layers though oval or elongated when proliferation is severe. Polarity may be disturbed. Vacuolation is sometimes increased, as is polymorphonuclear infiltration. Nuclear pattern may be altered with increase in nucleoli and granular material, and mitosis is frequent.

Atypical hyperplasia is approximately twice as common as in situ cancer. The changes are more frequent among Negro and among parous women, as are carcinoma in situ and invasive cancer. The average age of patients when atypical hyperplasia is detected is almost 36 years, about six years earlier than for in situ cancer; lesser degrees of alteration occur among the youngest patients, and more severe changes are noted when the mean age approaches that of in situ carcinoma, 41.6 years.

Of 102 consecutive patients with cervical hyperplasia, 65 were observed for eighteen months to four years. In 35 women, the changes regressed or at least were not demonstrable on subsequent examination, in 20 the change persisted, carcinoma in situ occurred in 9, and 1 patient had invasive cancer.

The lesion should not be regarded as innocuous. The final outcome cannot be predicted on the basis of histologic changes in the initial specimen. Some lesions may represent an early stage in carcinogenesis but cannot be differentiated from morphologically similar changes that are probably unrelated to cancer.

Atypical hyperplasia of uterine cervix. *Cancer* 8:42-52, 1955.

Surgery for Uterine Myoma

HERBERT P. NEWMAN, M.D.

Union Health Center, New York City

*The primary indications for surgery with myoma of the uterus are failure to control symptoms by nonoperative measures and suspicion of malignancy.**

DIAGNOSIS of uterine myoma may be in doubt until surgery is performed. If the uterus is larger than the size of the organ at twelve weeks' gravidity, pelvic disease may be obscured. Rapid or postmenopausal growth may be a sign of sarcoma, or surgical intervention

may be necessary in order to differentiate myoma from ovarian neoplasm.

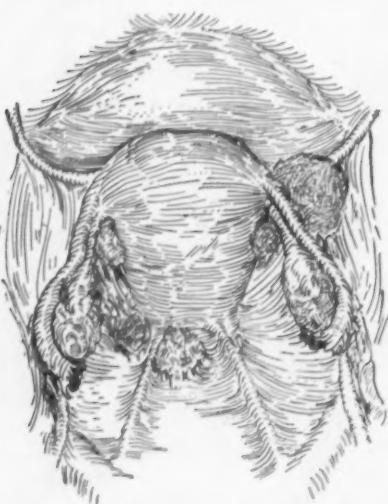
An operation is sometimes advisable when symptoms are suggestive of other disease of the uterus. Intermenstrual bleeding is never caused by myoma alone except with aborting fibroids and may be a sign of coexistent corporeal cancer, endometrial polyps, endocervical carcinoma, or ubiquitous hyperplastic endometrium.

Conservative therapy may be inadequate if menorrhagia produces anemia. Large fibroids located between ligaments are removed to prevent ureter compromise. Myomectomy is occasionally performed for sterility. Urinary symptoms do not respond to nonoperative therapy, but pain rarely requires surgery.

Abdominal hysterectomy or myomectomy was performed for 19% of 755 patients with uterine myoma. Nonoperative management was satisfactory for the other women.

Incidence of the growth among white patients is highest between the ages of 44 and 47 years. Among Negro women, the frequency is greatest from 36 to 39 years of age.

Uteri of 8% of 542 patients observed for three months to ten years before the menopause decreased in



Intraligamentous fibroids

*Clinical observations in patients with myoma of the uterus with particular regard to changes in size and indications for surgery. Am. J. Obst. & Gynec. 68:1489-1494, 1954.

size. Uterine growth was as frequent as no change in size. Increase in organ size before the menopause is most common in young patients. Growth and shrinkage of myomatous uteri are not continuous processes.

In approximately three-fourths of patients, the uterus decreases in size after the menopause. The initial effect appears to be on the myometrium alone; the myomas become more discrete and decrease later.

During periods of shrinkage, average rate of decrease is one week of gravidity for each month of menopause. During periods of

growth after the menopause, the average increase is comparable to one and a third weeks of gravidity for each month.

Profuse or prolonged menses are reported by half of the patients with myoma uteri. A fourth of the subjects with menorrhagia have anemia. A decrease in the menstrual interval is noted by about 11% of the women. Pain in the pelvic region or lower abdomen, primary or aggravated dysmenorrhea, and urinary complaints are not common.

The correlation between previous sterility and myoma uteri is probably low.

Probability of Gynecologic Cancer

CLYDE L. RANDALL, M.D., UNIVERSITY OF BUFFALO, AND PAUL R. GERHARDT, M.D., NEW YORK STATE DEPARTMENT OF HEALTH, ALBANY, report that approximately 10% of the female population will develop some form of gynecologic cancer during their lifetimes. After the age of 40, the probable incidence of the different sites for cancer is: breast, 5.2%; cervix, 2%; fundus uteri, 1.5%; ovary, 0.9%; and vulva, 0.2%.

On an annual basis, data show that not more than 1 cervical cancer will be found per 10,000 women in the 20's and not more than 6 per 10,000 women over 40 years of age. Only 3 women per 10,000 past the age of 40 will have uterine adenocarcinomas. The incidence of previously unrecognized cervical cancer begins to exceed 4 per 10,000 women when those examined are over 39 years of age; the annual occurrence rate of corpus cancer does not exceed this figure except among women over the age of 53.

Women with benign causes of menorrhagia before the menopause are more likely to have adenocarcinoma of the uterus. Controlling the disorder with irradiation-induced castration probably does not affect this predisposition; however, repair or deep cauterization of a lacerated eroded cervix may assist in prevention of cervical carcinoma.

The probability of the occurrence of the more common types of gynecologic malignancy. *Am. J. Obst. & Gynec.* 68:1378-1390, 1954.

Obstetric Import of Genital Anomalies

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*If anomalies of the female genital system are classified according to the functional impairment, obstetric complications can be anticipated and fetal loss may be decreased.**

SINCE the 2 mullerian systems canalize and fuse three times and at 3 levels, numerous combinations of female genital anomalies may be noted; 27 uterus-cervix-vagina variants are possible, ranging from proper formation of all organs to complete doubling at all levels. The structural types of each organ are classified in Table 1.

TABLE 1: EMBRYOLOGIC CLASSIFICATION		
I. Uterus	II. Cervix	III. Vagina
Single	Single	Single
Septate	Septate	Septate
Bicornuate	Double	Double
Double		

The obstetric significance of the anomalies depends upon the functional impairment, and severity of complications is proportional to the degree the structures deviate from normal. Muscle mass of the organs determines the ability of the uterine fundus to expand and contract and of the cervix to dilate.

Muscular action, or gestational capacity, of a septate uterus should be good because the fetus can generally push aside internal septum and occupy almost all the intra-

uterine space. In a bicornuate uterus, myometrium is distorted and musculature of both horns may be deficient. When the uterus is double, pregnancy is in half a uterus (hemi-uterus); potential muscle volume is diminished and capabilities for hypertrophy and expansion are limited.

A septate cervix has the usual amount of tissue, so function is not greatly impaired. Cervical efficiency is poor when the organ is double and delivery is through half a cervix (hemi-cervix).

Anomalies are classified according to function in order of severity with addition of the vaginal defects in Table 2.

Effects of anomalies of the genital tract were studied in 256 pregnancies of 108 women. No maternal deaths occurred. Incidence of multiple births was not unusually high.

TABLE 2: FUNCTIONAL CLASSIFICATION

- Any combination of single or septate uterus or cervix—gestational capacity and performance in labor are good.
- Bicornuate uterus—gestational capacity is impaired, but performance in labor is satisfactory.
- Single or septate uterus with double cervix—gestational capacity is good, but delivery is difficult.
- Hemi-uterus and hemi-cervix—gestational capacity and cervical efficiency are poor.
- Simple longitudinal (sagittal) vaginal septum
- Transverse vaginal septum

*Congenital anomalies of the female genital apparatus: obstetrical significance. Bull. Margaret Hague Maternity Hosp. 7:85-97, 1954.

Septate uterus was noted in 20 pregnancies. The abortion rate was 15%, but no viable fetal loss occurred. Incidence of breech presentation was almost 6 times as high as among women without malformations.

The women with *bicornuate uteri* had 143 pregnancies. The early fetal loss was about 37%, and total fatality rate was 47%. Of the 10 placental removals of viable fetuses in the entire series, 9 occurred when the uteri were bicornuate. Cesarean section was done in over 23% of cases; though cervical function is not impaired, malpresentation often necessitates operation.

Double cervix was associated with 25 pregnancies. Incidence of abortion was almost 22%, but no viable fetuses died. Cesarean sections were performed for over 72% of the women because of breech presentation, noted in 39% of cases, or because of difficulty in delivering through an inefficient hemi-cervix.

Of 33 pregnancies in *hemi-uteri*, 24 also involved a hemi-cervix. The fetal loss was over 50%. Breech delivery, cesarean section, and prematurity were more frequent than with any other anomaly.

The *simple longitudinal vaginal septum* is not hazardous if recognized.

Transverse vaginal septae vary from semilunar curtains to an almost complete occlusion. In 10 pregnancies, no abortions, breeches, or manual placental removals were associated.

Malpresentation is frequent with all anomalies. Cesarean section is often advisable when breech presentation occurs with cervical or vaginal malformation.

Fetal salvage rate is increased when section is substituted for delivery through a hemi-cervix when the fetus is large, the patient is a primipara and the presentation is breech, the vertex is unengaged at term or in labor, or trial labor is not satisfactory.

Pelviscopic Observation of Ovulation

JOSEPH BERNARD DOYLE, M.D., TUFTS COLLEGE, BOSTON, describes the observation of human ovulation and tubal peristalsis through a pelviscope inserted into an incision in the posterior vaginal fornix. The ampulla and fimbria of one fallopian tube firmly grasped the mediosuperior surface of the ovary. Contractions began at the fimbrial orifice and passed along the tube in peristaltic waves. The unruptured follicle lay on the lateroinferior aspect of the ovary.

Perifollicular and intrafollicular hemorrhage preceded escape of liquor folliculi. Biopsy of incipient corpus luteum one hour after escape of sanguineous fluid revealed early luteal changes in the granulosa and theca interna cells.

Ovulation and the effects of selective uterotubal denervation. *Fertility & Sterility* 5:105-129, 1954.

Symposium on Arthritis

Rheumatoid Spondylitis

C. STEWART GILLMOR, M.D.,
AND QUENTIN CRAMER, M.D.

*General Hospital No. 1,
Kansas City, Mo.*

ANKYLOSING spondylitis should be considered when a slightly anemic young man with nagging low back-ache and malaise shows rapid erythrocyte sedimentation, with or without roentgen change.

The cause of rheumatoid spondylitis is not known. Men are affected more often than women in a ratio of 9 to 1, usually at ages of 20 to 40 years.

Connective tissue is primarily involved. The disease generally starts in the sacroiliac joint, and synovitis with exudation affects posterior intervertebral and costovertebral regions later. Cartilage is destroyed and connective tissue produced.

As disease progresses, joint spaces become irregular, narrow, and sclerotic, vertebrae are decalcified, and paraspinal ligaments harden to form the typical bamboo spine (Fig. 1).

In a few instances, especially among women, dorsal or cervical lesions develop first. Occasionally, the shoulder and hip are involved, or peripheral joints such as the hands, knees, and ankles.

Onset may be related to mental or physical strain or to inclement weather. Symptoms usually start gradually and may be sporadic. The

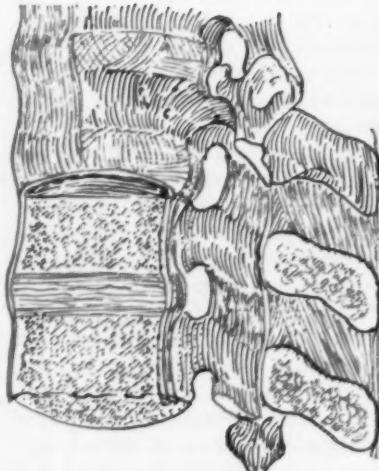


Fig. 1. Rheumatoid spondylitis

appetite often fails, and muscles are weak. Soreness and catching pains may be felt in the lower back, buttocks, or hips, and sciatica sometimes alternates from side to side. The sacroiliac area and spine are frequently tender.

Further involvement of joints, ligaments, and muscles causes the spine to stiffen; rotation, forward bending, and chest expansion become painful. In advanced stages, the lumbar curve tends to disappear, and waddle gait or severe kyphosis may be seen.

In some instances, symptoms continue for years before roentgen lesions are evident.

Although no cure is known, remission often can be achieved if

Symposium on arthritis. Missouri Med. 51:994-1003, 1954.

SYMPOSIUM

diagnosis is early and treatment is consistent. By rehabilitation, persons with rheumatoid arthritis can live happy and productive lives.

In the early phase, employment should allow for adequate mental and physical rest. Hydrotherapy, heat, and massage are applied to the back and extremities. Exercises are done to improve breathing and strengthen muscles of the back and extremities.

The bed should be firm, with a small pillow or none. Rest is taken morning and afternoon, and at least ten hours at night when disease is severe.

The diet should be high in vitamins, minerals, and protein, and sweets are curtailed. Iron and other compounds are given for hypochromic anemia. If 5 gr. of aspirin every three hours does not relieve pain, 50 or 100 mg. of Butazolidin per day may be given, with close watch for toxic reactions.

Roentgen-ray treatment relieves pain. As a last resort, small doses of cortisone or ACTH are employed, but the hormones are rarely used as continuous maintenance therapy.

Psychogenic Rheumatism

OTTO STEINBROCKER, M.D.

New York City

DAVID NEUSTADT, M.D.

Lenox Hill Hospital, New York City

SLIGHT or severe rheumatic or arthritic conditions can be simulated by psychogenic states. Diagnosis of functional disease is established by thorough interview of the patient;

physical, laboratory, and roentgen examinations to exclude organic lesions; and a few tests for skin sensitivity.

The neurotic individual often gives a vague account of innumerable complaints, particularly shifting pain. Dermal hypersensitivity has a regional, neural, or segmental pattern with organic disease, such as bursitis or neuritis, but is patchy and nonanatomic or may form a universal veneer with functional lesions.

Areas of hyperesthesia are determined by the pinch test. Skin is nipped first over a painless area, then at the site of distress, noting facial expression. Pinprick also may be tried. If extreme sensitivity to pinch is associated with ordinary response to prick, hyperesthesia is probably functional.

Next, a tender area is located, and a skin wheal is made with procaine. If palpation with the fingertip now causes no pain, the soreness was due to hyperesthetic cutis, and underlying structures are usually not involved.

If palpable tenderness persists, the skin wheal is pierced with a needle, 2 or 3 cc. of physiologic saline solution is injected subcutaneously, and three to five minutes later the spot is palpated. Anesthesia indicates a high degree of suggestibility, common in the psychotic.

If saline gives no relief, 5 to 10 cc. of 1% procaine solution is infiltrated deeply at the presumed level of tissue damage. Loss of symptoms at this stage generally confirms organic disorders.

Pain threshold and suggestibility

SYMPOSIUM

may also be evaluated by pressure over the mastoid tips and pinching of the achilles tendon.

Intracutaneous procaine wheal or saline injection may constitute suggestion therapy, as even transient relief may lessen functional disability and improve morale, though symptoms often return. For refractory cases or severe disturbance, neuropsychiatric care is advisable.

Osteoarthritis

ROBERT M. STECHER, M.D.
Western Reserve University, Cleveland

DEGENERATIVE arthritis, a common affliction of old age, is sometimes painful and may cause limping and necessitate use of a cane but practically never entails severe disability.

Joint cartilage deteriorates and finally disappears with osteoarthritis, leaving smooth, dense surfaces with spur formation (Fig. 2). Motion is

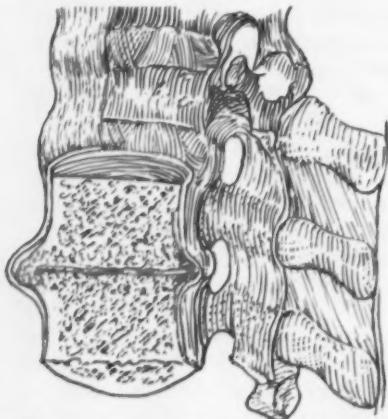


Fig. 2. Osteoarthritic joint with spur formation

impeded or blocked by irregularity but never by ankylosis. Unlike the rheumatoid conditions, osteoarthritis does not impair general health.

Predisposing factors are congenital anomalies, injury, or repeated strain as from athletics or hard physical labor.

Heberden's nodes is a form of osteoarthritis. When the disease is caused by local injury, the terminal joint of 1 finger becomes swollen. Pain disappears, but enlargement is permanent. A tendency toward idiopathic Heberden's nodes is inherited, being dominant in women and recessive in men. The nodes are noted initially in 1 finger and spread to other fingers on both hands.

Treatment of arthritis is relatively simple, though somewhat limited. Joint mice or other loose bodies and areas of aseptic bone necrosis should be removed without delay. To lessen strain on the knees, obese women should reduce.

Pain is often diminished by generous use of acetylsalicylic acid, liniments, electric pads, or heat lamps at home or by short-wave diathermy with massage and graduated exercise under supervision. Hydrocortisone injected into a painful knee or hip joint may be effective.

Steroid Therapy

THEODORE B. BAYLES, M.D.
Harvard University, Boston

A DRENAL hormones suppress rheumatic inflammation and fever but apparently do not change the underlying disease.

ACTH is available as powder for intramuscular or intravenous solu-

tions and as intramuscular gel. The intramuscular preparation of powder is started with 40 to 100 USP units daily in 4 doses at intervals of six hours. More potent is intravenous drip providing 20 units in 5% aqueous glucose solution, administered in eight hours. Dose of the gel is 20 units every twelve hours at first, then daily or every other day.

Cortisone is obtained as the acetate ester in oral tablets of 5 or 25 mg. and also as a microcrystalline suspension, 25 or 50 mg. to 1 cc. of physiologic saline, for intramuscular and subcutaneous routes. Oral doses given every six hours are usually satisfactory, but a daily intramuscular injection is substituted when the patient has a gastrointestinal disturbance.

Hydrocortisone has the same effects as cortisone but is more active and less soluble in body fluids. The acetate ester is dispensed in oral tablets of 20 mg. and in suspension containing 25 mg. per 1 cc. Local injection of the suspension is useful for bursitis and noninfectious inflammatory joint disease.

ACTH, cortisone, and hydrocortisone have great value for 3 groups of patients with rheumatoid arthritis:

- 1] Extremely sick adults or children with high fever who are unable to eat, losing weight, and rapidly becoming chronic invalids
- 2] Bedridden or crippled patients during rehabilitation, to lessen pain of joint manipulation and physical or occupational therapy
- 3] A few ambulatory young people not helped by rest, salicylates,

gold, psychotherapy, physical therapy, and orthopedic measures. Increased activity may, however, damage weightbearing joints.

Dosage in these 3 groups varies from 50 to 150 mg. of cortisone daily or from 40 to 140 units of ACTH in gel per week. Children require as much or more, regardless of body weight.

Rheumatic fever with or without carditis requires 200 mg. of cortisone per day or 20 units of ACTH gel twice daily for three to four weeks, before gradual withdrawal. Occasionally, cure seems to result.

In acute attacks of gout, steroids are given with colchicine to prevent exacerbation after treatment. Hormones may abort acute episodes of lupus erythematosus disseminatus, though massive doses are sometimes required. Vigorous early treatment can alleviate dermatomyositis or polyarteritis nodosa.

Steroids should not be administered to persons with severe diabetes mellitus, hypertension, congestive heart failure, tuberculosis, latent infection, peptic ulcer, senile osteoporosis, or mental disorders.

Rheumatoid Arthritis

BERNARD ROGOFF, M.D.
New York City

WITH the many aids now at hand for rheumatoid arthritis, a carefully planned, individual program may be successful where routine therapy is bound to fail.

Rheumatoid arthritis is systemic and should be managed accordingly. The main objectives of therapy

SYMPOSIUM

are to relieve discomfort, improve nutrition, correct deformity, and arrest progress of the disease.

Heat, rest, exercise, and salicylates are not yet supplanted. The diet may need additional vitamins and minerals. Orthopedic measures such as splints, braces, corrective shoes, and reconstructive surgery should be considered.

ACTH or cortisone is beneficial for only 10% of patients because of contraindications to use, undesirable side effects, and difficulty of withdrawal. If not more than 1 or 2 joints are incapacitating, hydrocortisone may be injected into the site.

Active synovitis is often halted and relapse prevented by gold salts prescribed in low dosage with frequent physical examination and laboratory tests. Phenylbutazone (Butazolidin) is a prompt, powerful, and often toxic analgesic. If symptoms are not reduced within a few days, treatment with the drug is stopped.

Emotional problems of the patient should be understood. The physician can be sincerely hopeful and encouraging as well as sympathetic.

Orthopedic Care

JOHN G. KUHNS, M.D.

Harvard University, Boston

Most of the disabilities that occur with chronic arthritis can be prevented, and function can be regained or improved when lost. Orthopedic measures include development of good posture, maintenance or recovery of muscular strength and

articular movement, use of apparatus, manipulation, and surgery to correct deformities, and vocational rehabilitation.

The bed should be firm, and generally only 1 pillow is placed under the head. Back and neck should not bend forward for long periods, nor arms and legs be constantly flexed. In sitting position, the entire back is supported in bed or chair, without flexion at the waist.

Muscles of deep breathing and erect posture are exercised while lying down and later while sitting and standing. Any local deformity is eliminated by special exercise. Older patients may require braces or corsets for a time or continuously.

To relieve muscle spasm and contracture, inflamed joints must be protected. A firm bandage or adhesive strapping may suffice for ambulatory patients with slight swelling. Plaster casts are more effective. The arm is splinted with plaster of paris about 8 layers thick, and circular casts are used for the legs. Plastic and metal devices are not as adaptable or satisfactory.

If plaster is molded to the entire limb in a comfortable position that permits no movement, spasm and pain often vanish without sedatives. Another dressing can generally be applied within a week so that the limb is in a better position, and other casts are substituted until the deformity is corrected.

After correction, the best position for both rest and function of joints is maintained until inflammation subsides. Fingers are kept in 20° of flexion, the wrist in 30° of

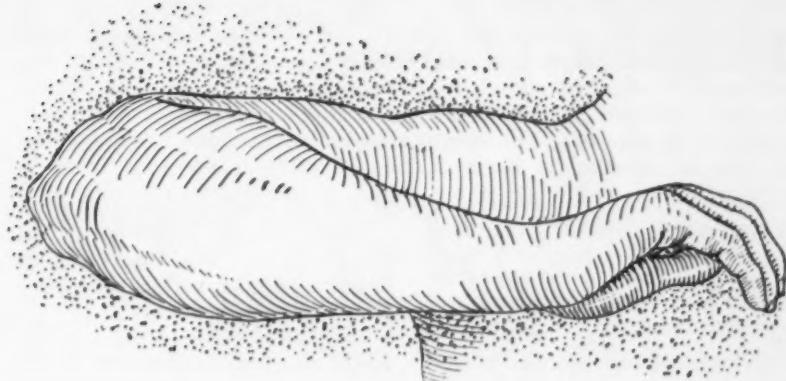


Fig. 3. Resting positions of joints

dorsiflexion with carpal arches molded, and the elbow in 70° of flexion (Fig. 3).

The shoulder is held in 90° of abduction during acute involvement (Fig. 3), later by the side. The spine is fully extended, and also the leg with the foot at right angles. Resting splints are worn first continuously, then only at night, and are discontinued when soreness and spasm disappear.

Heat is employed with splinting during acute inflammation. Moist or dry heat is applied for half an hour two or three times daily. Exercises are begun as soon as possible without pain.

If splinting is inadequate, more vigorous measures are employed. Continuous traction may be applied for deformities at the neck, shoulder, hip, or knee. A badly deformed joint may be stretched gently during intravenous Pentothal sodium anesthesia and then kept in plaster until the pain subsides. Several manipulative procedures may be necessary.

When no improvement results,

operation may be done, if the individual is emotionally stable and cooperative, the general condition good, and arthritis quiescent.

In some cases, arthrotomy or biopsy aids diagnosis. Pain-relieving techniques interrupt sensory nerves to the joint capsule or inhibit movement by fusion. However, surgical palliation is less often required with growing efficiency of methods that restore function.

Tight fascia or articular capsule may be cut, and contracted muscles or ligaments are lengthened, especially at the knee.

Osteotomy near the joint is being replaced by arthroplasty, which improves both position and function. Painless motion may be expected at the hip, knee, or elbow after arthroplasty. Elsewhere, the joint is likely to remain stiff but in good position for use.

Postoperatively, function must be regained through prolonged retraining, and the former occupation is resumed slowly. Even if damage is permanent, nearly all patients can be employed.

Management of Enuresis

EDWARD J. WERDEIN, M.D.

Georgetown University, Washington, D.C.

*A child should not be punished or disparaged for enuresis but instead should be properly trained in bladder control.**

THE frequency of enuresis in children ranges from 8 to 26%, and the nocturnal type is most common. The condition is very rare in adults.

Etiologic factors are multiple and both organic and functional in nature; probably 85 to 90% are functional. Psychiatrists observe that enuresis may be a presenting symptom of such conditions as character neurosis, chronic aggressive character pattern, or anxiety or conversion hysteria or may be the result of environmental and cultural errors. Psychoanalysts postulate that the condition is a wish-fulfilling regression to the early stages of infancy.

Only a few basic procedures are necessary for initial evaluation of a patient with enuresis. These include a careful review of previous disease, physical examination, intravenous pyelogram, and urinalysis. Whether wetting has persisted from infancy or began after normal control had been established should be determined. Disturbances due to organic disease frequently may be distinguished by the fact that urine is dribbled rather than passed in a full stream. The general condition

of a child with functional enuresis is usually normal. Excessive genital consciousness is sometimes observed in both sexes. Urinalysis and pyelogram are usually normal.

In selected organic cases, endoscopic examination should be made. Functional cases are often benefited by this procedure because of the unpleasantness, but the effect is usually not permanent and the underlying disorder may be aggravated.

In many instances, some mistake or neglect in original bladder training is believed to be an etiologic factor. Emotional scenes and arousing the child's antagonism to the training program must be avoided. Training should not be attempted earlier than the eighth or later than the twelfth month of life. Results are best if control is taught by the person who elicits the most favorable reactions in the child, usually the mother.

The child should be put on his chair at regular intervals during the day, and the intervals are gradually lengthened as control is acquired. Accidents must be passed over lightly, but successful performance should be given much praise. More patience is required for boys because of necessary training in 2 positions, the sitting and the erect.

Night training should not be attempted until daytime control has

*Enuresis. M. Ann. District of Columbia 23:673-676, 1954.

been attained. A supper relatively low in fluids may encourage night dryness. If wetting is persistent during the night, the child should be awakened completely before the expected time for urination. The time interval is lengthened as rapidly as possible until awakening is no longer necessary. Use of an alarm clock may speed the development of subconscious inhibitory control. If full continence is not attained by 4 years of age, despite

proper training, urologic and roentgenologic evaluation is made.

Advocated treatment procedures, some of which are painful and even border on sadism, are numerous. Removal of punishment and disparagement does away with the most disturbing factors of childhood enuresis. Encouragement will increase the child's self-confidence. A star-chart or similar device is often used, with moderate restriction of fluids in the afternoon and evening.

¶ ACUTE DISSEMINATED ENCEPHALOMYELITIS occurring after ingestion of phenolphthalein may be an allergic phenomenon. As the drug is not directly toxic, A. C. Kendall, M.B., of Coventry Hospital, England, ascribes the death of a 2½-year-old child to hypersensitivity.

Brit. M. J. 4902:1461-1462, 1954.

¶ NEPHROTIC SYNDROME IN CHILDREN may be favorably changed by continuous therapy with corticotropin gel. Edema and albuminuria subsided in nearly all of 25 patients treated with the hormone, report Arthur J. Merrill, M.D., Joseph Wilson, M.D., and Lloyd F. Timberlake, M.D., of Atlanta. Therapy was completely unsuccessful with only 1 patient. Corticotropin gel is usually given in daily doses of 1 mg. per pound of body weight until albuminuria is lacking for one or two weeks. Injections are then given every other day with monthly reductions in dosage according to individual need.

Arch. Int. Med. 94:925-930, 1954.

¶ CHILDREN WITH RHEUMATIC FEVER have diminished blood levels of vitamin A in the acute and early subacute stages of the disease and during intercurrent respiratory infections. The deficiency also occurs with severe cardiac damage and passive congestion of the liver, during acute exacerbations of the rheumatic process, or when the intake of vitamin A and carotene has been inadequate for some time, report Pauline Wang, M.D., and associates of the State University of Iowa, Iowa City. The diet of these patients should be supplemented with 3,000 to 5,000 I.U. of vitamin A.

Am. J. Dis. Child. 87:659-672, 1954.

Instruction of Mothers in Infant Care

MILO B. BROOKS, M.D.
Los Angeles

*Informative discussions during the baby's first year allay anxieties of the mother and may save time for the physician.**

PREVENTIVE medical care of infants may be taught to new mothers during customary office visits. Advice should be given according to a definite program.

Soon after birth, the mother is reminded that emotional factors affect the child's personality. The most important thing the parents can do during the first year is to enjoy the baby.

Counseling during the first six months pertains mainly to feeding. Simplification of food preparation and sanitation adds to enjoyment of the baby. Many powdered milk formulas and diluted evaporated milk are satisfactory. Breast feeding saves time.

Semisolid foods are not well assimilated during the first three months. Foods should be added to the diet according to appetite, not age. Canned vegetables, meats, and fruits save labor, but mother's cooking is equally good.

Immunization is generally started at three months of age. The schedule is shown in the table.

During the second six months, one concept of child care is dis-

IMMUNIZATION SCHEDULE

3 months	DPT*	Smallpox
4 months	DPT	
5 months	DPT	
1 year	DPT	Tuberculin
3 years	DPT	Tuberculin
5 years	DPT	Tuberculin
		Smallpox
7 years	DPT	Tuberculin
10 years	DPT	Tuberculin
		Smallpox

*Diphtheria-Pertussis-Tetanus

cussed at each of the monthly visits.

Requirements for a balanced diet are explained the sixth month. A list of basic daily food intakes may be given to the mother. Diet can be based on the food least well taken; equivalent proportions of all other foods may then be added.

The seventh month the mother learns what to report when illness occurs. Necessary information includes [1] name and age; [2] main complaint; [3] symptoms and temperature, in sequence; and [4] treatment that has been administered. The system may halve telephone time.

Care of minor illness, especially regarding the importance of rest and fluids, is reviewed the eighth month. A child should not be urged to eat when sickness decreases appetite, since a reduced diet promotes rest. Promotion of rest is also the main value of aspirin, sedatives, nose drops, cough syrup, and steam. The mother is given basic information about fluid balance. Hydration,

*Instruction of mothers in well baby care. California Med. 82:13-15, 1955.

elimination, and defense mechanisms are explained.

Drugs are discussed the ninth month. Necessary household anti-septics are solution Merthiolate for fresh cuts, tincture of Mercresin (stainless) for infected lesions, and, perhaps, antiseptic soap. Action of antibiotics is explained.

At ten months, the mother should be told that shoes are worn only for appearance, warmth, and protection. Development of the arch is inhibited by rigid shoes in early infancy and promoted by spontaneous kicking. A thick sole absorbs shock from hard surfaces.

Habits such as toilet training and thumbsucking need attention at eleven months. The experience of a child on the toilet should be relief,

and force and regimentation impede relaxation. Though a limited amount of thumbsucking is not harmful, advice to ignore the habit may force inhibitions on the mother so the problem should be handled according to judgment of the parents.

At the end of the first year, prevention of accidents should be stressed. Accidents kill more children than all infectious diseases combined. Common hazards are hot stoves, scalding liquids, worn-out fuses, electric cords, cigarettes, fires, open pools, falling from a car, backing auto over child, and unlocked cupboards. Since nothing is out of reach for an aggressive toddler, all dangerous drugs should be locked in a cupboard.

Serum Cholinesterase in Childhood

VIRGIL R. BLEISCH, M.D., AND HARRY SCHWACHMAN, M.D., CHILDREN'S MEDICAL CENTER AND HARVARD UNIVERSITY, BOSTON, believe serial determinations of serum cholinesterase may be a useful index in the management of liver disease, malignancy, nephrosis, and malnutrition of children.

The wide variety of diseases associated with high or low cholinesterase values limits the diagnostic usefulness of single serum cholinesterase determinations. However, extremely high values, especially over 100 units, suggest the nephrotic syndrome.

High values are often associated with increased anabolism or with elevated motor activity as with nervous system disease, gastrointestinal disorders, and aspirin intoxication. Low values are noted with conditions that depress anabolism, including liver disease, malnutrition, infection, anemia, and tumors.

Serum cholinesterase values during childhood are not affected by sex or age. However, the values are significantly lower for adolescent females than males. During the neonatal period of full term and premature babies, the values are depressed.

Serum cholinesterase values in childhood in health and disease. *Pediatrics* 13:426-438, 1954.

Management of Influenzal Meningitis

R. KOCH, M.D., AND M. J. CARSON, M.D.

Los Angeles Children's Hospital and University of Southern California, Los Angeles

*Improved methods of treatment have lowered mortality and the incidence of neurologic residua from influenzal meningitis.**

To be satisfactory for the treatment of meningitis, an agent must [1] be rapidly effective in concentrations not toxic to body tissues, [2] permeate the intraspinal space in adequate concentration, and [3] be suitable for parenteral administration. Combined therapy with sulfonamides, streptomycin, and oxytetracycline has proved the most effective for meningitis caused by *Hemophilus influenzae*, type B. By using antibiotic and chemotherapeutic agents together, emergence of bacterial resistance is delayed.

Sulfadiazine may be given subcutaneously as a sodium salt in 0.5 to 5% concentration in 1/6 molar sodium lactate or lactate Ringer's solution. Plasma levels of approximately 15 mg. per cent are usually maintained by a twelve-hour dosage of 0.1 gm. per kilogram. Levels in the spinal fluid are approximately 60% of those in plasma. Urine may be easily alkalinized to prevent renal complications by administering 3 to 5 cc. molar sodium lactate per kilogram of body weight daily. When the patient is improving and

not vomiting after two or three days, oral triple sulfonamides may be substituted and continued for a week.

Streptomycin is bactericidal in concentrations of 10 mg. per cubic centimeter. A daily dosage of 50 mg. per kilogram may be given subcutaneously or intramuscularly. Diffusion into the cerebrospinal fluid is swift. Since the greatest bactericidal effect and bacterial resistance both occur rapidly, the drug is usually discontinued on the fourth day. Vestibular damage may occur only twenty-four hours after intramuscular use and one intrathecal injection.

Oxytetracycline is administered intravenously during the first one to three days in daily amounts of 100 mg. per kilogram of body weight, divided into equal doses every six hours. Depending on the general condition of the patient, intramuscular or oral preparations are then substituted. When the outlook is favorable, therapy in gradually decreasing dosages is continued ten to fourteen days.

Toxic manifestations are slight. The incidence of complications is greatly reduced by the drug; recovery is usually prompt with disappearance of fever in three to five days.

*Management of *Hemophilus influenzae*, type B, meningitis. *J. Pediat.* 46:18-29, 1955.

¶ CARDIAC ANOMALIES WITH MEASLES may be evidenced electrocardiographically in 15 to 20% of patients, although clinical signs of myocarditis are rarely observed. Abnormalities appear from two to twenty days after onset of the rash, report Martin Goldfield, M.D., Norman H. Boyer, M.D., and Louis Weinstein, M.D., of Boston University and Massachusetts Memorial Hospitals, Boston.

J. Pediat. 46:30-35, 1955.

¶ INFANTILE DIARRHEA caused by coliform bacteria may be effectively treated with neomycin. In an epidemic among 24 premature infants, Cyril S. Stulberg, Ph.D., Wolf W. Zuelzer, M.D., and Anthony C. Nolke, M.D., of Wayne University, the Children's Hospital of Michigan, and the Child Research Center of Michigan, Detroit, identified the causative agent as *Escherichia coli* O-111, B₄. Neomycin, given in daily doses of 50 to 100 mg. per kilogram of body weight, stopped diarrhea within three days after organisms disappeared from the stools.

Pediatrics 14:133-142, 1954.

¶ OBSTRUCTIVE JAUNDICE and acholic stools of nonmedical causation in infants more than 2 weeks old are amenable to surgery often enough to make such intervention worthwhile. Relief may be effected in nearly one-third of cases, find E. M. Greaney, M.D., W. H. Snyder, Jr., M.D., and Lawrence Chaffin, M.D., of the Los Angeles Childrens Hospital and University of Southern California, Los Angeles. The method recommended comprises exposure through a transverse incision, on-the-table cholangiography when feasible, and complete dissection of the portal triad. If the cholangiogram shows a normal extrahepatic ductal system, exploration is abandoned.

Am. J. Surg. 88:17-22, 1954.

¶ INFANTILE CONVULSIONS controllable only by pyridoxine may be the manifestation of an anomaly in the metabolism of vitamin B₆. Since the condition occurred in the newborn infant of a woman treated with large amounts of pyridoxine for hyperemesis gravidarum, Andrew D. Hunt, Jr., M.D., of the Hunterdon Medical Center, Flemington, N.J., and associates designate this requirement for continuous supplementation with the substance as pyridoxine dependency rather than deficiency. The convulsive state is amenable to daily oral doses of 2 mg. of the pyridine derivative, but mental development is greatly retarded.

Pediatrics 13:140-145, 1954.

Complications of Tonsillectomy

RICHARD THOMAS BARTON, M.D.

University of California at Los Angeles

*Many complications of tonsillectomy are prevented by a technic that combines use of an endotracheal tongue blade, complete removal by sharp dissection from the superior to the inferior pole, and closure of the fossa.**

A NUMBER of recent major contributions have helped reduce the incidence of complications with tonsillectomy. These conditions include hemorrhage, infection, anesthetic problems, and psychic trauma.

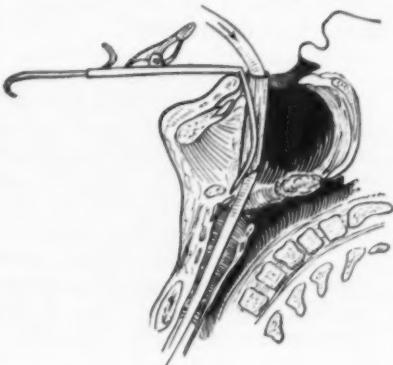
Immediate postoperative hemorrhage is effectively controlled by use of the closed-fossa tonsillectomy technic. The fossa is closed without including the pillars. The sutures usually begin at the lower pole, enter where the posterior tonsillar pillar joins the floor of the fossa, and are brought out at the junction of the anterior pillar and the fossa. The floor of the fossa should be tented up with a clamp to allow as much room as possible between the floor and the underlying structures. Secondary bleeding is also usually prevented by this method. Administration of vitamins C and K is of additional benefit.

In order to prevent infection, removal of lymphoid tissue should be complete. Tonsils are sharply dissected from the superior to the in-

ferior pole. Snares or tonsillotomes should not be used.

Anesthetic problems have led to most of the tragic complications of tonsillectomy. However, aspiration, hypoxia, and laryngospasm may be prevented by use of an endotracheal tongue blade. The instrument comes in 3 sizes designed to fit either the Crowe-Davis or the McIvor mouth gag and is constructed so that a conduit is included in the tongue depressor portion through which an endotracheal tube is passed. After the patient is anesthetized and the endotracheal tube is passed, the mouth gag with attached tongue blade is inserted into the mouth. The tube then slides through the conduit (see illustration).

This device allows intubation without interfering with the surgical field. Because the tube is inserted



*The ideal tonsillectomy. Postgrad. Med. 17:23-27, 1955.

into the tongue blade, protrusion into the oral cavity is only slight. In addition, the anesthetist is free to use an agent of personal choice.

After the surgeon has completed the operation, the anesthetist aspirates the tracheobronchial tree with a catheter through the endotracheal tube. The mouth gag, tongue blade, and tube are removed together. The patient awakens when the tube is withdrawn, and the entire respiratory tract has been cleansed of secretions. An adequate airway is maintained throughout the operative procedure.

To avoid the *psychic trauma* that

sometimes occurs postoperatively, an honest explanation of the need for surgery and of hospital care should be given to the child. Tension and anxiety of the parents should not be communicated to the child, and one or both parents should be present during induction of anesthesia and in the postanesthetic period. The reason for the anesthesia also should be explained. Hostility of the child during the postoperative period should be permitted expression.

Operation should be avoided during the months when bulbar poliomyelitis is a possible complication.

Therapy of Acute Laryngotracheobronchitis

HAROLD L. HICKEY, M.D., DENVER, advises prompt medical or surgical management when signs of acute obstructive laryngotracheobronchitis are seen in a young child. The entity, fatal in about 70% of cases, is usually manifested by a thick, viscid, often crusting, nonmembranous exudate in the tracheobronchial tree, sudden onset, high fever, stridor, and extreme toxicity.

Medical treatment consists of maintaining a relative humidity of 70 to 90% with an oxygen concentration of 40% at a room temperature of 65 to 75°. For infants, a Burgess box, into which moisture and a wetting agent can be nebulized, is satisfactory; oxygen, 4 to 6 liters per minute, is used as the nebulizer. Postural drainage, adequate fluid intake, and early antibiotic treatment are essential; sedation should not be used.

If medical management fails, tracheotomy may be necessary. With a Mosher lifesaver, intratracheal catheter, or bronchoscope inserted to maintain an airway, a tracheotomy tube is introduced until the trachea is opened. Local anesthesia or light ether with oxygen is used.

The upper end of the wound may be sutured well away from the tube, but the lower end should be left unsutured to prevent emphysema. Care is taken to avoid extrusion of the tube, which is usually removed in seven to ten days. A cool, humid atmosphere should be maintained postoperatively.

Management of acute laryngotracheobronchitis. *J. Kansas M. Soc.* 55:7-11, 1954

Aneurysmal Bone Cysts

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DAVID G. PUGH, M.D., AND RALPH K. GHORMLEY, M.D.
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*Conservative therapy is adequate for aneurysmal bone cysts, which can be differentiated from other bone lesions by roentgenologic and pathologic examination.**

VERTEBRAE and long bones of the extremities are the most frequent locations of aneurysmal bone cysts. The benign lesions have been observed in almost all structures of the body skeleton but only in the occipital bone of the skull.

The bone cysts are most common among young persons. Ages of 26 patients ranged from 5 to 37 years.

Pain, swelling, limitation of motion, and tenderness are the chief symptoms. Pain is generally not severe but is intensified by exercise. Swelling, often coexistent with pain, develops slowly and is progressive. Encroachment on a joint limits motion.

Vertebral lesions usually produce pain and stiffness of the segment of the spinal column in proximity to the involved bone. Neurologic manifestations may occur when severe swelling affects the spinal cord.

The injuries are often detected after trauma causes local exacerbation of symptoms. Symptoms may persist for three weeks to three years.

In two-thirds of instances, roentgenologic examination reveals a well-circumscribed rarefied area, usually in an eccentric position in the bone. The interior of the lesion has a soap-bubble or honeycombed appearance. The cortex is disrupted and bulges eccentrically. A peripheral thin shell of periosteal new bone is noted.

In young patients, the lesion is located in the diaphysis adjacent to the epiphyseal cartilage.

Gross and microscopic pathologic examinations are always diagnostic. Vascular spaces of various sizes are engorged with unclotted blood, and the walls lack most of the features of normal blood vessels. Connective-tissue septae often contain thin strips of osteoid.

Benign giant-cell tumors can usually be differentiated from aneurysmal bone cysts by roentgen-ray examination. Giant-cell growths usually occur in long bones and almost invariably in the epiphysis. The tumor is rare among persons less than 20 years of age, often recurs, and metastasizes in 10% of instances. Microscopic examination reveals homogeneous cellular stroma but no cavernous blood spaces typical of the cysts.

Aneurysmal bone cysts may erode contiguous structures, but he-

*Aneurysmal bone cysts. Radiology 64:56-65, 1955.

mangomas do not. Vertical striations are evident on roentgenograms of hemangiomas. The microscopic pictures also differ.

Cystic spaces filled with free blood are not noted with fibrous dysplasia of bone.

Differentiation of unicameral and aneurysmal bone cysts is occasionally difficult, especially in children. Roentgenograms of the simple cysts show sharper margins, and the cortex is intact, though thin. The single-cavity lesions do not contain blood unless as a result of fracture or previous therapy.

Osteogenic sarcoma, metastatic

cancer, fibroma, and chondroma can be excluded by histologic examination.

Curettage is generally performed to obtain specimens for diagnosis and is also the preferred treatment. Among 24 patients observed one to thirty-five years after therapy, 16 were treated by curettage with or without supplementary irradiation; only 1 cyst recurred.

Excision of the cyst was performed successfully in 5 instances. Amputation was done once because of the size of the cyst and twice after erroneous diagnosis of malignant disease.

Diagnosis, Therapy of Osteoid Osteoma

DAVID W. PATCH, M.D., GEORGE S. PHALEN, M.D., AND JAMES A. DICKSON, M.D., CLEVELAND CLINIC, believe that osteoid osteoma must always be considered as a possible cause of pain in the extremities or backs of patients 10 to 30 years of age, especially males.

Pain, usually strongest at night, occurs directly over the lesion and gradually becomes more constant and severe. Physical examination ordinarily reveals acute tenderness and slight swelling over the lesion. If one of the bones of the lower extremity is involved, the patient may limp. Inflammatory changes are associated only if the osteoid osteoma is close to a joint.

Roentgenographic findings differ according to the age of the patient and the location of the lesion. The typical roentgenogram reveals an oval or round area of decreased density surrounded by sclerotic bone. The inner area, the so-called nidus, may be translucent or mottled with irregular sclerotic spicules of bone and usually measures 0.5 to 2.5 cm. in diameter.

The lesion apparently always occurs singly and eventually heals spontaneously over a period of years. However, surgical excision is recommended, since operative risk is slight compared to endurance of years of pain. The entire nidus is removed, but not the surrounding sclerotic bone. Since incomplete removal may cause recurrence, roentgenographic examination in the operating room before the incision is closed is necessary.

Osteoid osteoma. *Cleveland Clin. Quart.* 21:123-132, 1954.

Fractures of the Head of the Radius

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*South-East Kent, Canterbury, and Isle of Thanet hospitals,
England*

*Since the elbow joint tolerates trauma poorly, even a minor injury may cause some loss of function.**

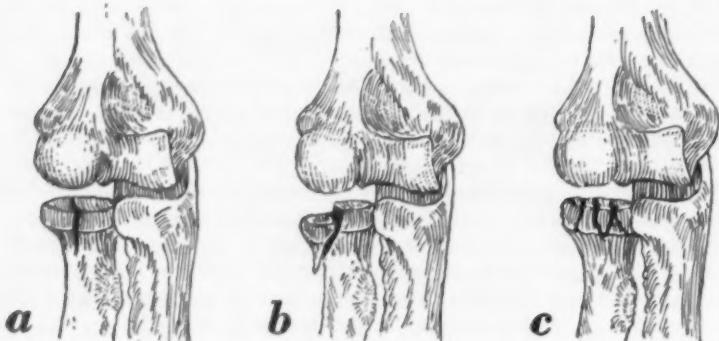
THE head of the radius normally glides over the capitellum of the humerus in flexion and extension; actual contact is made only when the elbow is in extreme flexion and the radius is in the midprone position. Consequently, if flexion or extension of the joint is to be limited, a relatively severe mechanical interference with the gliding motion of the radius must exist. Many times loss of full extension is a result of associated injury of the cartilaginous plates on the articular surfaces of the humerus and ulna. Any slight damage to the trochlea

of the humerus and the trochlear notch of the ulna will impair flexion and extension since the joint is very snug fitting.

The usual cause of radial head fractures is indirect trauma through the long axis of the forearm bones, as in falling on the outstretched hand. At the moment of impact the entire elbow joint sustains a compressive force which, when the elbow sags acutely into the valgus position, is referred to the radial head.

The fractures may be classified into 3 types:

- Type 1 consists of subchondral crack fractures and those involving a sector of the lateral quadrant of the head of the radius without displacement (Fig. a).



*Some observations on fractures of the head of the radius with a review of one hundred cases. *Brit. J. Surg.* 42:123-132, 1954.

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Summit, N.J.

- Type 2 includes fractures in which a segment of the lateral border of the radial head is separated from the other quadrants, is impacted and depressed, or is tilted out of line (Fig. b).
- Type 3 comprises comminuted fractures involving the entire head of the radius (Fig. c).

Type 1 fractures may be treated conservatively with immobilization in a sling or in a plaster-of-paris cylinder with the elbow at 90° of flexion. If after sixteen days the traumatic hemarthrosis is absorbed, active elbow exercises may be begun.

Full range of movement may be expected in most cases, without joint laxity, tenderness over the medial ligament, or irregularity of the distal radioulnar joint. Loss of extension is usually slight and causes no disability.

Röntgenograms show no distortion of the articular plateau of the radius; lateral and medial joint surfaces are regular in outline. Osteoarthritic change does not occur. However, the fissure fracture of the plateau is often visible.

Type 2 fractures may be treated conservatively if the break involves no more than one-fourth of the articular circumference without comminution, is depressed below the

joint surface, and is not tilted out of line in any way. Anteroposterior, lateral, and oblique roentgenograms are necessary.

In all other cases, even though tilting and comminution are slight, the radial head should be resected. Loss of extension is usually about 20° but full rotation range is maintained.

With type 3 fractures, the radial head is completely disorganized, and total excision is recommended. A full range of elbow joint movement cannot be expected. Extension is usually limited by about 25°, and supination and pronation by about 15°. Ordinarily, these limitations are not disabling.

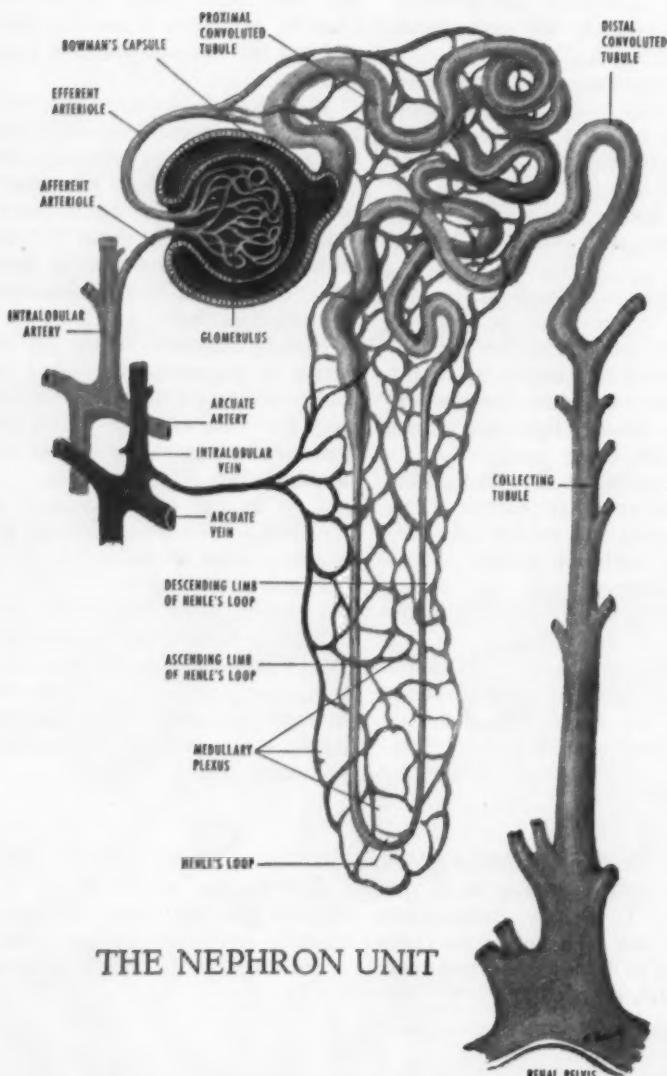
Röntgenograms reveal no evidence of degenerative change and joint surfaces are normal. New bone may form around the radial neck but does not encroach on the joint space.

Pain in the elbow joint is not common and is never severe. Discomfort in the medial joint area occurs only with fractures without displacement of the fragments and is caused by tearing of the medial capsular ligament by valgus strain. Lateral joint pain is noted with comminuted fractures of the head from ligamentous damage, especially if the radial head is resected.

¶ ALLERGIC ECZEMATOUS CONTACT DERMATITIS may result from handling bank checks. Boynton H. Booth, M.D., of Indiana University, Indianapolis, observes that the protective coating of ink on safety type checks contains several resins and dyes known to be allergens and reports 2 instances of dermatitis proved by patch tests.

Arch. Dermat. & Syph. 70:803-804, 1954.

New, Effective, Non-Mercurial Oral Diuretic



THE NEPHRON UNIT

MICTINE*

STRUCTURE

Mictine, brand of aminometramide, is 1-allyl-3-ethyl-6-amino-tetrahydropyrimidinedione. Mictine—result of years of research—is not a mercurial, xanthine or sulfonamide agent.

ACTION AND EFFECTIVENESS

Mictine inhibits reabsorption of sodium ions by the renal tubule. In therapeutic dosage it has not caused any effect on glomerular filtration rate, renal plasma flow, cardiac output, heart rate or blood pressure.

Approximately 70 per cent of unselected patients respond to Mictine.

TOLERANCE

Mictine is without serious toxic effects as used. It has not produced any alteration in the blood or blood-forming organs or in renal or hepatic function. At times headache or gastrointestinal symptoms (anorexia or nausea but rarely vomiting or diarrhea) have occurred, but, these effects may be reduced to a minimum by giving

Mictine on an interrupted dosage schedule.

ADMINISTRATION

Mictine is useful primarily in the maintenance of an edema-free state and in the *initial and continuing* control of patients in mild congestive failure. In such patients, dosage is one to four tablets daily *with meals*, in divided doses on an interrupted schedule. An interrupted dosage schedule may be accomplished by giving the drug on alternate days; or by its administration for three consecutive days and its omission for four consecutive days.

Mictine also may be used for *initial diuresis* in *more severe* congestive states, particularly when mercurial diuretics are contraindicated. In these more severe congestive states, dosage is four to six tablets daily *with meals*, in divided doses on an interrupted schedule similar to those mentioned above.

SUPPLIED

Bottles of 100 uncoated tablets of 200 mg. each.

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D. A. LONG, M.D.

G. H. PERCIVAL

F. F. HELLIER, M.D.

Medical Research Council,
London*

Some types of skin disease are benefited by treatment with ACTH or cortisone.†

THE use of ACTH and cortisone in the treatment of exfoliative dermatitis, eczema, and Besnier's (allergenic) prurigo is reported. Daily dosages vary from 100 to 150 mg. of cortisone or 50 to 100 I.U. of ACTH, often with reductions toward the end of the course. Cortisone is sometimes replaced by a diminishing dose of ACTH. Occasionally, a patient receives as much as 200 mg. of cortisone daily, and a few subjects are treated with 10 I.U. of ACTH by intravenous drip. Most patients receive oral ascorbic acid, 100 mg. two or three times daily. If the urinary output and weight suggest fluid retention, sodium chloride intake is restricted and 20 gr. of potassium chloride is administered three times a day.

Striking improvement may be

noted, usually by the third day, in patients with idiopathic *exfoliative dermatitis*. Irritation, scaling, and exudation are all greatly reduced. ACTH appears to be somewhat more effective than cortisone. Cure or good control is obtained in most patients, although individual requirements vary greatly and maintenance therapy may be necessary over long periods of time. Exfoliative dermatitis occurring after psoriasis usually is benefited initially, but the tendency to relapse is great.

Results of steroid therapy for eczema vary according to the type of lesion. Patients with constitutional or exogenous eczema may be dramatically benefited by ACTH or cortisone, but relapse commonly occurs after withdrawal of therapy. Individuals with eczema due to sensitization from a specific external allergen may be rapidly and completely cured. The response to treatment is less satisfactory in cases of seborrheic, nummular, or varicose eczema.

Therapeutic effect is most noticeable in the acute manifestations. Hormones may be useful in combatting acute exacerbations of eczema and in facilitating introduction of other forms of treatment.

Results of therapy for Besnier's prurigo are satisfactory in the acute forms of eruptions, but chronic lichenification is not as effectively ameliorated.

*Panel on the Dermatological Applications of A.C.T.H. and Cortisone.

†Treatment of skin disorders with A.C.T.H. and cortisone. Brit. M. J. 4900:1307-1313, 1954.

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burp or allergies.

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Removal of Scars by Abrasion

JAMES W. BURKS, JR., M.D.

Tulane University, New Orleans

*Planing with a wire brush is the preferred treatment for some skin defects and can be done in the office.**

ACNE scars are particularly suited to abrasive surgical removal. Accidental, superficial tattoos may also be destroyed, but artistic tattoos with pigment implanted deep in the corium necessitate time-consuming, tedious procedures and some scarring results.

Scars from trauma, chickenpox, and smallpox and wrinkles about eyes and mouth caused by facial expressions, aging, and folding of the skin are easily corrected. Some benign superficial nevi may also be treated, as may vascular nevi and port-wine stains. Other defects which may be abraded include keloids, lentigines, chloasma, keratoses, adenoma sebaceum, acne keloid, and skin graft sites.

When a revolving wire brush is employed, the entire epidermis is removed. New skin regenerates from rete pegs in superficial abrasion and from follicular epithelium in deep planing. Local anesthetic, ethyl chloride, provides a resistant surface and a relatively bloodless field.

Required equipment includes [1] stainless-steel brushes of various di-

ameters, [2] an electric motor capable of producing 12,000 r.p.m., [3] air blower, [4] standard coarse ethyl chloride sprays, and [5] pre-chilling packs. Spray localizers and protective shields and gowns are optional.

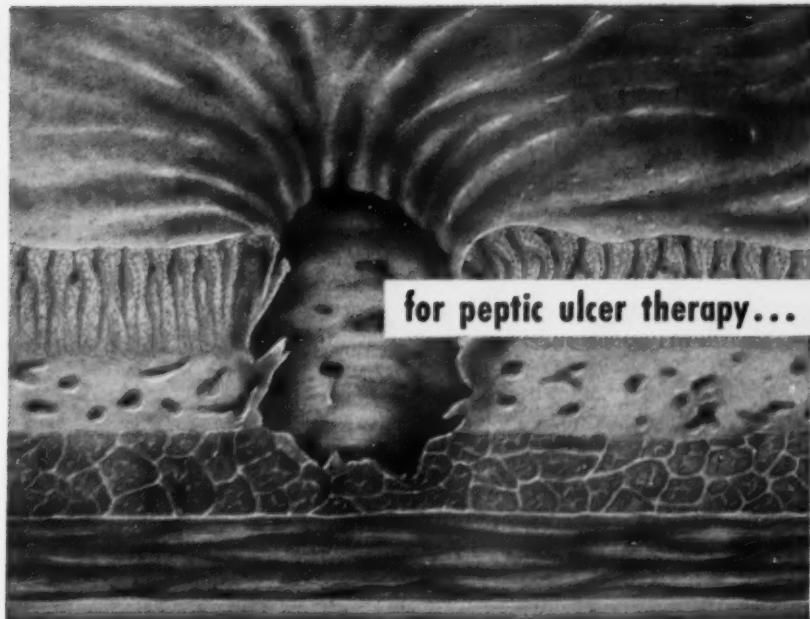
If the operative field is near the hairline, the hair is shampooed the preceding night. Cosmetics are removed, and men are shaved. Pre-operative sedation is not needed. Apprehension can usually be alleviated by describing the technic to the patient.

Pre-chilling packs, kept in the refrigerator overnight, are applied by the patient for twenty to thirty minutes to relieve the sting and shock of ethyl chloride spray. The operative field is cleansed with alcohol. Lead shields are placed over the eyes, and the nostrils are plugged with cotton.

Ethyl chloride is sprayed on the area to be treated. When a stream of air from the blower is applied, freezing to board hardness occurs in twenty to thirty seconds. The operative field is limited to 3 sq. in. to prevent thawing before completion of planing and to guard against frostbite of any unabraded areas.

Planing is done as in shaving with an up-and-down stroke instead of a side-to-side motion. The lowest area should be abraded first.

*Removal of scars by abrasion, an office procedure. *J. Louisiana M. Soc.* 107:29-33, 1955.



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DERMATOLOGY

Postoperative bleeding is controlled with sterile dry gauze applied about twenty minutes after completion of the procedure. Dressings with antibiotic ointments or petroleum jelly should be changed daily.

Healing occurs in ten to fourteen days, depending upon the degree of freezing, depth of abrasion, and viability of the tissue bed.

Abrasions may be repeated after four weeks. Some patients have as many as 4 planings.

Genital Moniliasis as Conjugal Infection

MORRIS WAISMAN, M.D., TAMPA, FLA., has noted an increased incidence of genital moniliasis among both men and women subsequent to administration of broad-spectrum antibiotics to women. Infection caused by *Candida albicans* was demonstrated in 9 men whose wives acquired the disease during pregnancy or after antibiotic therapy.

Among men, moniliasis is manifested by balanitis, balanoposthitis, crural intertrigo, or a diffuse eruption affecting the external genitals and the perineal and anal areas. Itching is usually severe. Microscopic examination and culture of epithelial scrapings show *C. albicans* in abundance.

The predominant symptom of monilial vulvovaginitis is itching of the vulva and adjacent areas, at times severe with burning. Dysuria and dyspareunia are common. The vaginal wall is inflamed, and examination discloses erythema and, perhaps, edema of the vulva. The vulvar eruption is often a macerated, bright red dermatitis; the periphery may be studded with small, thin-roofed, and flaccid satellite vesicopustules or miliary erosions. A thin, odorless, white or yellow vaginal discharge, not especially abundant, is visible at the introitus. Cheesy flakes are often in the secretion or clinging to the vulva or vagina.

The fungous organism can be eradicated in most cases if predisposing causes, such as diabetes, are controlled and reinfection is avoided. Treatment must be prolonged. If a woman with vulvar and crural moniliasis uses a vaginal tampon constantly, reinfection of skin by the vaginal discharge is slight.

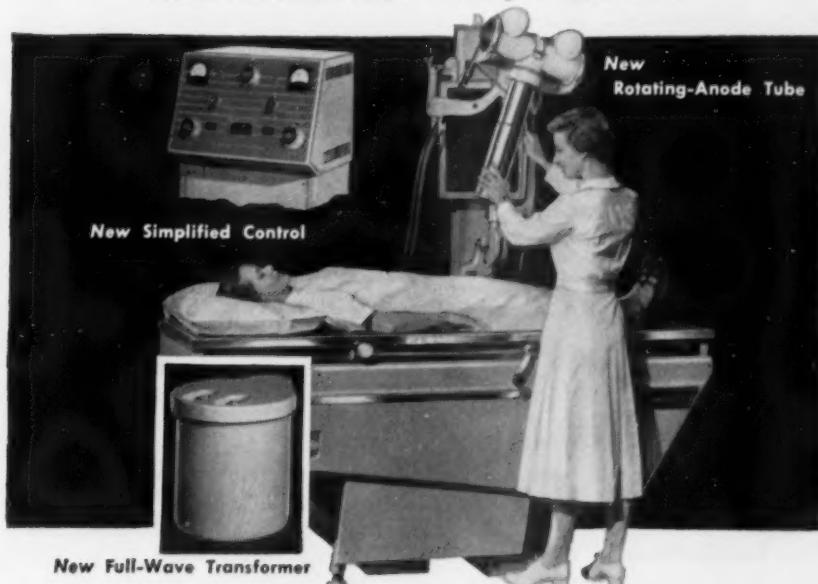
Common antifungal agents for vaginal use are 1% aqueous gentian violet; 1 to 4 Lugol's solution; 1:200 borax douches; and proprietary preparations of caprylic, propionic, or undecylenic acids.

Medication for the skin must be nonirritating. Intermittent compresses of solutions of silver nitrate in distilled water, 1:1,000 or 1:500, are rapidly effective when acute vulvar or scrotal, perianal, and crural dermatitis coexist with painful denuded areas.

Genital moniliasis as a conjugal infection. Arch. Dermat. & Syph. 70:718-722, 1954.

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Chronic Simple Glaucoma

PETER C. KRONFELD, M.D.

University of Illinois, Chicago

*Obstruction of aqueous outflow without a significant reduction in aqueous production probably prevails in the early stages of chronic simple glaucoma.**

THE mechanistic approach is used to investigate the unstable ocular tension with chronic simple glaucoma. The aqueous veins and laminated veins are observed in the natural state and also while under influence of mechanical manipulation or drugs, the rate of flow through the anterior chamber is measured, and the capacity of the outflow channels is determined.

A steady flow is visible within the aqueous or laminated veins. Since the veins are direct outlets of Schlemm's canal, the flow in the more proximal sections of the trabeculum canal of the Schlemm system as well as in the anterior chamber must be steady.

The quantitative relationship between the rate of flow through the anterior chamber, that is, the overall flow, and the rate of flow through single aqueous veins is not known. However, when rate of total flow is increased by compression of the globe, an acceleration of the flow within or widening of the aqueous veins is noticeable. Glaucomatous

eyes require more external pressure than eyes that are not diseased to increase flow or widen vessels.

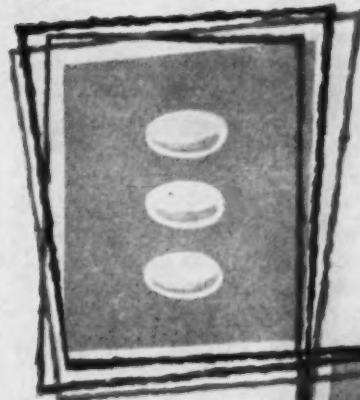
Close to the place of emergence from the sclera, the pressure in aqueous veins varies from a mean of 9.5 mm. Hg in nonglaucomatous eyes. The mean for eyes affected with chronic simple glaucoma may be slightly lower.

In veins emerging farther back, presumably directly from the ciliary body, the pressure is considerably higher. The pressure prevailing in the anterior veins which are visibly connected with aqueous veins is definitely not elevated in chronic simple glaucoma.

The difference between the pressures at the anterior chamber and the emissaria of the aqueous veins may be considered the outflow pressure. The outflow pressure in eyes affected with chronic simple glaucoma sharply exceeds the usual outflow pressure, so either the rate of resistance or flow is increased.

Studies with tracer fluorescein indicate that elevation of the ocular tension in chronic simple glaucoma is not due to hypersecretion. The minute volume of the anterior chamber among patients without eye lesions is 2.2 ± 0.37 cu. mm. The mean for eyes affected with chronic simple glaucoma is 1.7 cu.

*Chronic simple glaucoma: results of the mechanistic approach. *New York J. Med.* 54:3371-3376, 1954.



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mm., or slightly but significantly less than in nonglaucomatous eyes.

Resistance during the passage of aqueous from the anterior chamber to the scleral emissaria can be measured directly in the human eye. Direct methods of measurement are based on the characteristic ability of the human eye to give up some fluid contents under the effect of external pressure.

Abnormal resistance to aqueous flow is noted with chronic simple glaucoma. With early simple glaucoma, resistance to outflow is more pronounced under conditions of higher pressure when greater de-

mands are made on the outflow channels. As glaucoma advances, the obstruction to outflow becomes more evident in all of the tension ranges.

The combination of obstruction to aqueous outflow with no or only slight reduction in aqueous production could account for all the anomalies of ocular tension, including exaggerated diurnal fluctuations and general instability.

The disturbance of the mechanics of ocular fluid exchange may be a manifestation of a primarily vascular disease with a specific localization in the anterior uvea.

Factors in Successful Corneal Transplantation

R. TOWNLEY PATON, M.D., MANHATTAN EYE, EAR AND THROAT HOSPITAL, NEW YORK CITY, reports that definite prognosis of corneal transplantation can be made in many cases, thus avoiding useless operations.

In all cases of scarring, results depend on the extent of opacity, the amount of vascularization, and the time interval between subsidence of the active inflammatory process and operation. Extensive vascularization from the conjunctival vessels is less detrimental to graft transparency than vascularization of the deep vessels, some of which arise from branches of the ciliary vessels. When a large deep vessel exists, operation should not be done unless growth is inhibited or destroyed by preoperative beta radiation therapy.

Of 299 cases observed for two months or longer, 193 grafts remained clear. The percentages of clear grafts in the various diagnostic groups were: keratoconus, 89.3%; Groenouw's dystrophy, 85.7%; scarring from inactive ulcer, 66.7%; nonspecific scarring, 68.8%; interstitial keratitis, 62.2%; leukoma, 55.6%; active ulcer, 50%; trachomatous scarring, 45.5%; chemical burns, explosion injuries, and traumatic wounds, 39.1%; adherent leukoma, 35.3%; and Fuchs's dystrophy, 30.8%.

Vision improved in 160 of 222 patients, was not changed in 46, and was reduced in 13. Enucleation was necessary within eighteen months in 3 patients and after four years in 2 others.

Corneal transplantation. *Arch. Ophth.* 52:871-916, 1954.

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Digitalization During Surgery

BARNETT A. GREENE, M.D., AND SAMUEL BERKOWITZ, M.D.

*Kings County, Unity, Adelphi, and Brooklyn Women's hospitals,
Brooklyn*

*Rapid digitalization is advised when acute myocardial insufficiency is evidenced by shock, congestion, or both.**

MYOCARDIAL insufficiency, either unrecognized or inadequately treated, is an important factor in many deaths during and soon after anesthesia. Because of the danger of ventricular fibrillation with standard digitalis preparations, the physician is often reluctant to institute intravenous digitalization in the operating room except for terminal or obviously advanced congestive failure. With the use of acetyl strophanthidin, however, extremely rapid and brief action can be safely induced.

SELECTION OF PATIENTS

Pulmonary edema and the other classic signs of backward failure are easy to recognize. When myocardial failure appears in the guise of shock in association with hemorrhage or anesthetic vasodilatation, however, the diagnosis may be obscure and is most difficult to determine when insufficiency is caused by peripheral circulatory failure. Insufficiency should be strongly suspected when shock is not explicable by the common causes during sur-

gery and anesthesia. Diagnosis becomes certain when the shock state responds to digitalization.

Specific indications for digitalization in the operating or recovery room are as follows:

- Congestive failure, especially pulmonary edema, even with suspected or proved acute myocardial infarction
- Dyspnea or bronchospasm of cardiac origin, even without obvious failure
- Shock refractory to blood volume expansion, vasopressor medication, and other therapy
- Tachycardia with auricular fibrillation or flutter; sinus or nodal tachycardia presumed to arise from myocardial insufficiency in patients with antecedent heart disease
- Cardiac enlargement or electrocardiographic evidence of left ventricular strain before or during thoracic surgery
- Cyanosis unrelieved by adequate ventilation with oxygen, especially in a patient with cardiac disease
- Myocardial damage after cardiac resuscitation, especially when surgery must continue

TREATMENT

Digitalis is considered the specific pharmacologic treatment for myocardial insufficiency because

*Myocardial insufficiency during operation. *New York J. Med.* 55:57-68, 1955.

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for peptic ulcer pain; spasm

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ANESTHESIOLOGY

the preparation increases the mechanical efficiency of the heart muscle in patients with heart failure. Stroke volume, cardiac output, and pulse pressure are increased, and oxygen consumption, diastolic heart volume, circulation time, venous pressure, and cardiac rate are decreased.

Intravenous digitalis is advisable when therapeutic effects are required within two hours or less. Maximum effect is unnecessary for emergency use and dosage rarely need be calculated for saturation.

Acetyl strophanthidin acts within one to five minutes, has a peak action in ten to fifteen minutes, and has a four-hour duration of significant effect. In a patient who

has not had digitalis for ten days, 0.6 mg. is administered intravenously followed by 0.2 mg. at intervals of ten to fifteen minutes until the therapeutic objective or minor toxic effects appear. The drug may be administered safely undiluted if injected over a period of one to two minutes. For the patient who is partly digitalized, 0.2 mg. is given initially, followed by similar doses every ten to fifteen minutes.

Caution is required when auriculoventricular conduction defects or bundle-branch block exists and in patients who have received ephedrine, quinidine, cyclopropane, or Pentothal. Fractional dosage of acetyl strophanthidin should be employed in such cases.

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Steroid Support for the Third Sex

WILLIAM H. MASTERS, M.D., AND JOHN W. BALLEW, M.D.

Washington University, St. Louis

*Well-controlled sex steroid replacement can provide significant physical and psychic stimulation in persons over 60 years old.**

THE concept of a third sex or neutral gender in elderly men and women is based on the fact that gonadal function is significantly reduced during the fifth and sixth decades of life. Pituitary, adrenal, thyroid, and pancreatic glands are essentially unaffected during this period, so that from a humoral standpoint the individual functions as efficiently as a younger person.

Failure of the gonads is apparently caused by a lack of external stimulation rather than an inherent factor in the aging process. Urinary gonadotropic determinations in elderly individuals reveal continued activity in the form of follicle-stimulating hormone production, suggesting considerable organ reserve. However, the function of both ovaries and testes is easily impaired during the reproductive years. The gonads are extremely sensitive to the influence of other elements in the endocrine system as well as general body dysfunctions. The relatively short-lived gonadal activity apparently represents the complete effort of the individual reproductive glands. Gonadal sex

steroid production wanes at the same time as the reproductive activity.

Therapy is undertaken on a bisexual basis. Taking advantage of the state of essential castration, the individual sex steroids are used in combination.

Testosterone and estrogen are administered to both men and women in a milligram ratio of 20 to 1. In women, no breast tenderness or vaginal bleeding occurs, even after years of therapy. Vocal pitch is not lowered and hair growth is not stimulated. In men, breast development, protein wastage, or vasodilatory effect is not noted. Because therapy can be basically standardized, mistakes of unopposed hormone influence and of undertreatment are easily avoided.

The time of initiating therapy must be chosen for each patient. Usually the male climacteric occurs five to ten years later than the female menopause and is ordinarily more gradual.

Overtreatment is almost impossible as long as recommended dosage schedules are observed. Once a plateau of regenerative activity has been reached, continued steroid support will maintain the level indefinitely. Withdrawal of therapy results in complete physical and mental involution within six months.

*The third sex. *Geriatrics* 10:1-4, 1955.

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*Neuhauser, I.: Successful Treatment of Intestinal
Moniliasis with Fatty Acid-Resin Complex. A. M. A.
Arch. Int. Med. 93:53, 1954. McGivney, J.:
The Anorectal Complications of Broad Spectrum
Antibiotic Therapy. Texas State Journal of
Medicine. Jan. 1955.

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Biliary Surgery for Aged Patients

FRANK GLENN, M.D., AND DANIEL M. HAYS, M.D.

New York Hospital-Cornell Medical Center, New York City

*Elective biliary surgery is well tolerated by the geriatric patient but the mortality rate rises sharply after emergency procedures.**

AGE is not an important factor when surgery for disease of the biliary tract is done as an elective procedure. Often, the physician has a tendency to defer or reject surgical intervention for the geriatric patient on the basis of age alone. This conservatism is apparently unwarranted and in some instances may be harmful. When the patient is carefully evaluated and prepared for surgery, the mortality rate of the procedure should never exceed 2%.

By performing elective cholecystostomy in an aged patient with degenerative disease processes, the surgeon frequently is able to prevent an emergency operation later. In most instances, an elective cholecystectomy is done several months after the cholecystostomy. Prophylactic cholecystectomy for younger patients with calculus cholecystitis is also recommended.

Surgery in older patients with acute cholecystitis demands meticulous management. Operation should be done as early as possible in order to avoid perforation, stone obstruc-

tion, and jaundice. Among geriatric patients, the incidence of associated biliary tract neoplasia and of choledocholithiasis with larger and more numerous choledochal calculi is increased. Acute processes in the biliary tract often occur with few signs and symptoms.

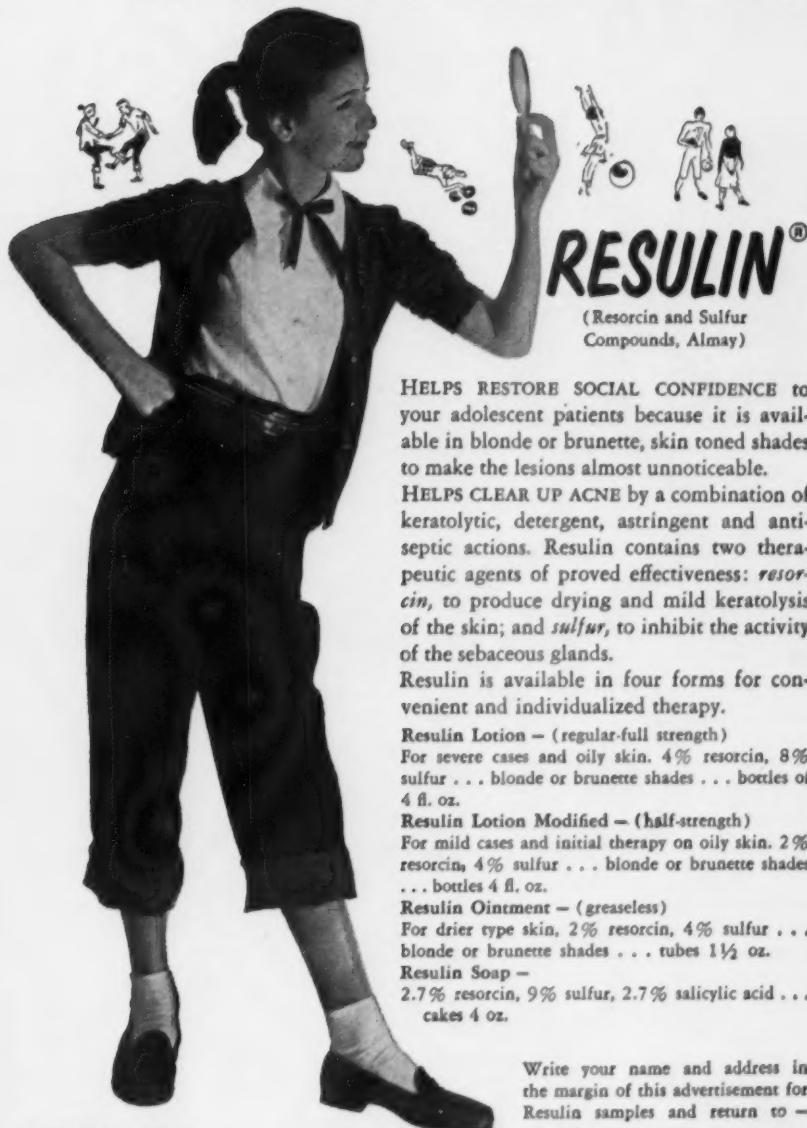
An analysis was made of 362 patients, 65 years of age and over, with biliary tract disease necessitating surgery; 225 patients had chronic cholecystitis, 92 acute cholecystitis, 11 postoperative strictures and other benign strictures of the choledochus, 29 cancer of the gallbladder, and 5 carcinoma of the extrahepatic biliary ducts.

The operative mortality among patients over 65 years of age with acute cholecystitis was almost 11%. In a control group of patients between 50 and 64 years, the mortality was 2%. With chronic cholecystitis, the death rate was more than 4% in patients over 65 and less than 3% in the group of control patients.

The over-all operative mortality rate of patients over 65 years of age was 6.7%. The most common causes of death, in order of frequency, were hepatic insufficiency, acute coronary occlusion, acute pulmonary emboli, peritonitis, and renal insufficiency.

*The age factor in the mortality rate of patients undergoing surgery of the biliary tract. Surg., Gynec. & Obst. 100:11-18, 1955.

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Medical Forum

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Effects of Abnormal Weight on Pregnancy*

QUESTION: What effect does the nutritional status of a pregnant woman have on the fetus?

Comment invited from

ERNEST W. PAGE, M.D.

► TO THE EDITORS: As Dr. Winslow T. Tompkins and Dorothy G. Wiehl have noted, there is no doubt that severe maternal malnutrition affects the fetus in a variety of ways. Although medical opinion is by no means unanimous, there is general agreement that under conditions of famine imposed by war or severe malnutrition due to poverty [1] the stillbirth and neonatal death rates are higher; [2] premature labors are more common; [3] the size and weight of the infant are reduced; and [4] the "general pediatric rating" of the babies is poor. There is, however, no convincing evidence for an increased abortion rate or a greater number of congenital malformations under the same circumstances.

Congenital malformations can be induced in animals by single deficiencies of any number of essential vitamins or minerals. In women, too, folic acid antagonists commonly cause malformations when abor-

tion fails to occur. These, however, are experimentally produced, severe deficiencies which rarely occur in animals or humans.

A big question arises when we begin to deal with the "average American diet," irrespective of the socioeconomic group concerned. Does supplementation of such a diet directly improve fetal nutrition? No conclusive evidence supports such a contention, notwithstanding some claims to the contrary. An improvement of the maternal nutritional status, however, may reduce the frequency of maternal complications, including intercurrent diseases, and thus fetal welfare may indirectly benefit. The general dictum that the fetus withdraws most essential nutrients from the mother even to the point of producing maternal deficiencies still holds true. In the case of vitamin B₆, for example, we have found that supplementation of the maternal diet with 10 mg. of pyridoxine daily raises certain enzymatic activities of the maternal blood but does not increase the same activities of the fetal blood or the placenta.

Even though direct benefits to the fetus resulting from supplementation of the average diet may be questioned, there is little doubt that

*MODERN MEDICINE, Nov. 1, 1954, p. 102.

(Continued on page 187)

for those



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RESION therapy will control about 90% of common diarrheas.

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the pregnant woman herself will derive benefits from the addition of iron, calcium, protein, and vitamins.

ERNEST W. PAGE, M.D.

San Francisco

Therapy of Complications of Pregnancy*

QUESTION: Is estrogen administration during pregnancy proper prophylaxis against complications?

Comment invited from

LEOPOLD Z. GOLDSTEIN, M.D.

LEONARD H. BISKIND, M.D.

WILLIAM J. DIECKMANN, M.D.

► **TO THE EDITORS:** Drs. George V. Smith and Olive W. Smith have repeatedly reported great success in increasing the fetal salvage in complicated pregnancies with the use of progressively increasing doses of stilbestrol. Recently the authors have again emphasized the prophylactic use of this hormonal substance in the prevention of late toxemia, abortions, and intrauterine fetal death. When stilbestrol is used, expensive hormonal investigations are unnecessary. Stilbestrol is an inexpensive therapeutic hormonal agent and may be administered without any ill effects.

Stilbestrol is especially effective for treating habitual aborters and increases fetal salvage in such patients. The drug should be given to patients who have already aborted once, to elderly primigravidae, and to those conceiving after therapy for sterility. In cases of habitual abortion, it is suggested that stil-

bestrol and progesterone be combined and started as soon as pregnancy is diagnosed. It should be borne in mind that the use of progesterone alone in threatened abortion may maintain a defective ovum and terminate in the phenomenon of missed abortion.

In a percentage of cases of habitual and threatened abortion, fetal loss is still encountered despite strenuous hormonal therapy and all other forms of treatment. In such cases, factors other than defective ovum, malimplantation, and so on are at fault.

LEOPOLD Z. GOLDSTEIN, M.D.
Philadelphia

► **TO THE EDITORS:** Improvements in obstetric knowledge, skill, and technic during the past twenty-five years, particularly in prenatal care, have brought prospective mothers to labor and delivery in far better physical condition than ever before.

Much still needs to be done in the matter of fetal salvage. Too many pregnancies are lost by threatened and habitual abortion in the early months of pregnancy. The administration of estrogen, as outlined by the authors several years ago, gave promise of salvaging many pregnancies that might otherwise have been lost.

During the past few years many investigators have reevaluated the efficacy of estrogen administration as a proper prophylaxis against these complications. The subsequent reports in the literature express considerable doubt as to the value of this therapy. Besides estrogens,

*MODERN MEDICINE, Nov. 1, 1954, p. 99.

MEDICAL FORUM

other hormone preparations are being prescribed, and the reported results are no different than in cases in which no hormone therapy was used.

At a 400-bed general hospital having an active obstetric staff of approximately 30 physicians, a poll was taken in regard to the use of these preparations. For habitual abortion, a great majority of physicians felt that the administration of estrogen was of little or no value. For threatened abortion, about 50% of the physicians indicated that their results were poor and so they no longer used estrogens. The other 50% admitted that although the results might be poor, the temporary psychologic value of this form of therapy made it worth while in their opinion.

My own results in a comparatively small number of cases have been completely negative. Bed rest and the use of paregoric seems to accomplish as much as the use of estrogens in small, moderate, or high doses. I agree wholeheartedly with Greenhill on this subject. Greenhill remains skeptical as to the value of hormones in the treatment of threatened abortion, and states that stilbestrol is of practically no value in the treatment of habitual abortion. I admit a personal bias against the use of estrogens in high doses in patients with familial backgrounds of malignancy.

During the past year, reports have appeared in the literature as to the value of citrus flavonoids in a number of conditions, including those in which bleeding plays a major role. Work is under way to

determine the value of these nutritional substances in the treatment of threatened and habitual abortion.

LEONARD H. BISKIND, M.D.
Cleveland

► TO THE EDITORS: I believe that our work shows that the routine administration of stilbestrol to pregnant patients according to the dosage advised by the authors is of no therapeutic value. Several other similar studies have been reported. Had the authors compared their patients with a similar group treated with placebos, their results would not have been so striking. The results of our stilbestrol-treated patients are better than the results for all of our patients but not better than for the controls.

WILLIAM J. DIECKMANN, M.D.
Chicago

Technic for Bloodless Tonsillectomy*

QUESTION: When is the Sluder method of tonsillectomy advisable?
Comment invited from

FRANCIS L. LEDERER, M.D.
ERNEST B. EMERSON, JR., M.D.
SAMUEL J. PEARLMAN, M.D.
SAMUEL L. FOX, M.D.
E. H. BERGENDAHL, M.D.
M. K. HARTZELL, M.D.
T. L. HYDE, M.D.
NORMAN W. CLEIN, M.D.
KENNETH A. PHELPS, M.D.

► TO THE EDITORS: The Sluder method of tonsillectomy is advisable only when the person who em-

*MODERN MEDICINE, Nov. 15, 1954, p. 121.



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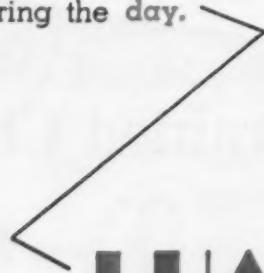
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MEDICAL FORUM

ploys the technic is skilled and experienced in the use of the special instrument. It is possible to generalize and say that the same basic principle applies to any technic of tonsillectomy, whether done by dissection and snare or with some other instrument such as the Beck or Sluder.

Since Dr. Max Unger calls for a modification of the Sluder technic by the use of sutures while the instrument is still in place, this discussion concerns itself more with the so-called bloodless tonsillectomy. In competent hands, with indications properly established, many little nuances have been added to control bleeding. Dr. Sluder himself was known to boast of the lack of postoperative hemorrhage after using his technic, but one of his assistants remarked in an aside to me, "Ask him why he has a telephone at his bedside."

Another one of my friends had a Sluder instrument for both the right and left tonsils. For some minutes he left both in the pharynx in the form of crossed swords before driving the guillotine forward. This pressure, he claimed, aided hemostasis.

FRANCIS L. LEDERER, M.D.
Chicago

► TO THE EDITORS: In 1909, Waugh reintroduced dissection tonsillectomy. In the years to follow, improvement in the art of insufflation anesthesia, along with the development of the Davis-Crowe and McIvor mouth gags and consequent improvement in the exposure avail-

able in tonsil surgery, slowly brought tonsillectomy up to a level of technical excellence where it may again be considered a surgical procedure.

It is difficult to understand why use of the guillotine technic has persisted. For instance, thoracic surgeons stopped using snares on the pulmonary hilum more than fifteen years ago, despite the fact that dissection takes more time. General surgeons long ago stopped using snares for anything except perhaps small polyps. Yet, the otolaryngologists have continued to employ an antiquated and oftentimes brutal type of operation when they know that suitable surgical technics are available.

The time involved in doing a clean dissection tonsillectomy and proper closure of the wound, deep layers first and mucous membranes last, with the consequent control of bleeding, elimination of dead space, and healing by first intention is a matter of twenty to thirty minutes. Halsted pointed out many years ago that speed is a poor criterion of the excellence of surgery and that it may be and often is a real threat to a patient's safety. The speed of the Sluder technic is no longer necessary.

Probably the greatest advantage in the dissection tonsillectomy with closure is in its control of hemorrhage. Barring unforeseen major accidents, major hemorrhage at the operating table, serious and sometimes fatal early bleeders, and the so-called five- to seven-day bleeders can become things of the past. These facts alone sell the modern technics to the general surgeon, and

unless the otolaryngologist sees fit to adopt the standards of modern surgery, he can expect to see more and more of his tonsil patients going to general surgeons for safety's sake.

It is my considered opinion that the Sluder method of tonsillectomy has no further place in modern medicine.

ERNEST B. EMERSON, JR., M.D.
Rochester, N.Y.

► TO THE EDITORS: Sluder's operation for tonsillectomy is an accepted technic in widespread use. It shares its position with a number of other methods that are equally acceptable and widely practiced.

Among these are use of knife, dissection, and snare as well as the other guillotines. The one popularized by the late Dr. Joseph C. Beck serves as a good example.

Dr. Unger's technic combines an operation and a method for hemostasis especially useful for adults under local anesthesia. He is correct in saying that the Sluder technic for tonsillectomy often failed to attain adequate hemostasis. Others have shared this experience. This is evidenced by numerous modifications of the original instrument, which consist chiefly of additional crushing blades to promote satisfactory hemostasis.

Troublesome bleeding during the operation is a defect not exclusive to Sluder's method. It is common to all accepted forms of tonsillectomy. Control of bleeding is subject to the same rules and principles that prevail in general sur-

gery. These stress the time factor, sponge pressure, the clamp, ligature, and suture and are applicable in children and adults regardless of the type of anesthesia used.

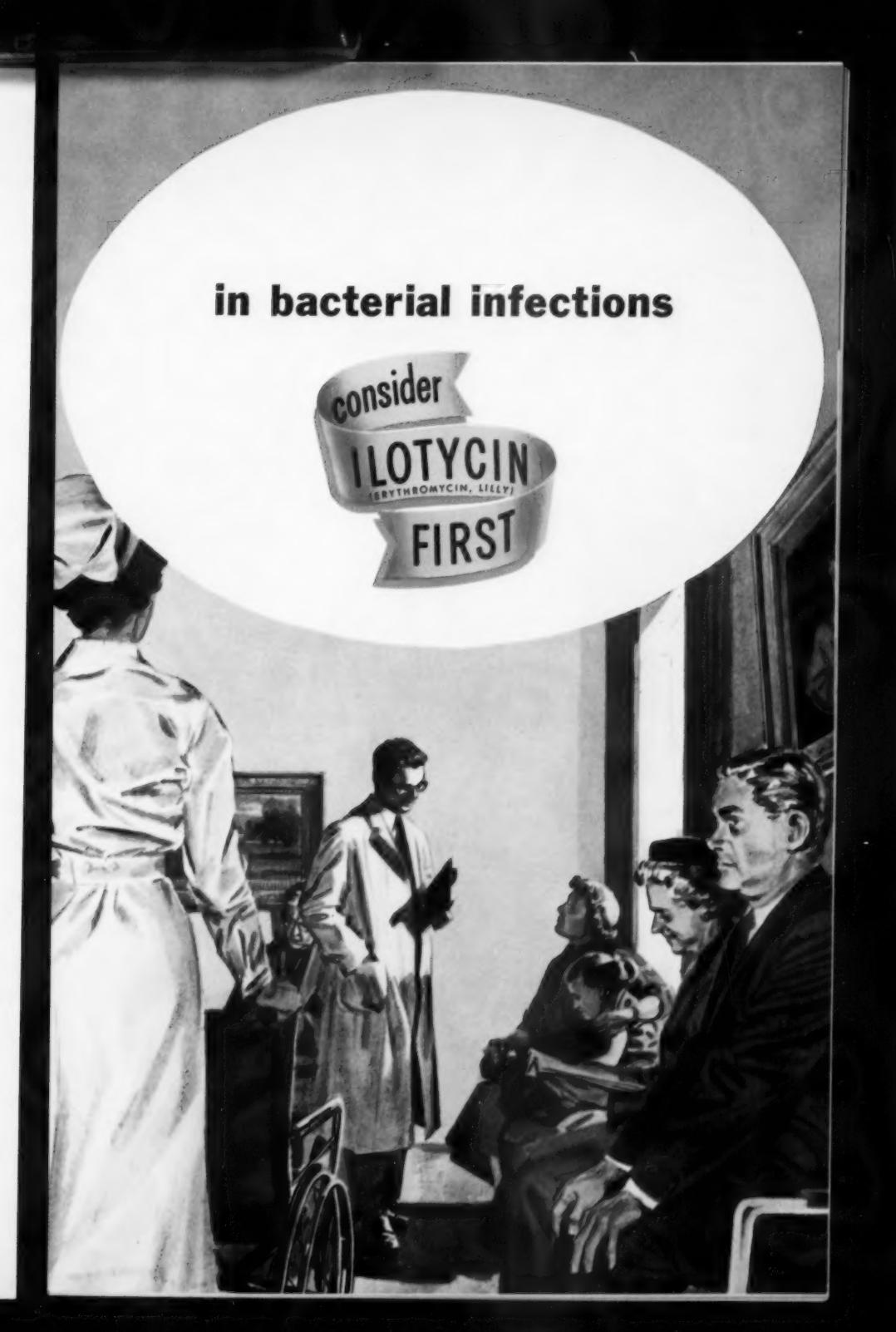
This does not mean to say that Dr. Unger's method done on adults under local anesthesia may not be highly satisfactory. A canvass, however, of the entire question of method in tonsillectomy and its consequent problems of hemostasis will certainly reveal other approaches. Many of these are adequate and they satisfy those that use them and who have thus acquired the necessary skill and experience.

SAMUEL J. PEARLMAN, M.D.
Chicago

► TO THE EDITORS: The Sluder method of tonsillectomy and its modifications are quite popular in many parts of the country, especially for use in children. Proponents of the Sluder method give as its virtues shorter operating time and better hemostasis. However, in my own experience, I find that surgical dissection of the tonsil is preferable on all scores.

In the first place, as a teacher I feel that surgical dissection offers greater opportunity for developing skill in working in the throat, and hence I favor it in the training of interns and residents. In the second place, I feel that the removal of lingual tonsillar tissue is most important and can be accomplished satisfactorily only by dissection.

Whereas hemostasis has always been considered one of the virtues of the Sluder technic, I note that



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MEDICAL FORUM

Dr. Unger does not consider hemostasis very satisfactory with the Sluder method and implements it with multiple suturing. In the method of straight dissection, the use of free ties or sutures is routine for hemostasis and does not occupy any great amount of time in well-skilled hands.

It is my constant endeavor to use as few instruments as possible in any operation and to use the most standard types. The use of the Sluder apparatus, at least in this area, would require the surgeon to carry one with him at all times and would require its constant resterilization between operations. I am sure this would lose more time than the method could possibly gain for the surgeon.

SAMUEL L. FOX, M.D.
Baltimore

► TO THE EDITORS: I believe that an operator should be skilled in the snare and dissection technic before attempting to use the Sluder method to remove tonsils. In spite of the operator's skill with this guillotine, there are times when the entire tonsil is not removed and the procedure must be completed with a snare. I believe that the Sluder instrument works best when the tonsils are slightly larger than the opening of the instrument itself, so that the tonsil is squeezed through the opening in the guillotine.

I don't believe there is any hard and fast indication for the use of the Sluder method, but it may offer an advantage of speed when the tonsils are hypertrophied enough to

obstruct the airway. So far as the total operating time is concerned, I believe the technic offers no advantage; there is some bleeding with this method.

It is felt that when the blood vessels lie in a more longitudinal direction across the blade of the knife, one encounters more brisk bleeding subsequent to the removal of the tonsil than would ordinarily be found with snare and dissection. Although this is controlled without any more difficulty than with any other tonsillectomy, it does not shorten required anesthetic time.

I believe that it would be well not to use the Sluder method in people who have had peritonsillar abscesses because of the marked adhesions in the capsule and also because of the greater tendency to bleed. This would also hold true for adult tonsillectomies, whether done under general or local anesthesia.

E. H. BERGENDAHL, M.D.
Fort Wayne, Ind.

► TO THE EDITORS: A routine tonsillectomy was described by Celsus in 50 A.D. as follows: "It is only necessary to separate them [tonsils] all around with the fingernail and tear them out."

Today the goal of each of us is to clearly and adequately remove all tonsil tissue with the least amount of trauma to the patient. Any procedure is acceptable which conforms to sound surgical principles and combines speed, simplicity, and ease of method.

In 1911, Dr. Sluder published
(Continued on page 198)

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1. Allergenicity of Modified and Processed Foodstuffs, *Annals of Allergy*, Vol. 10, No. 6, pg. 682, Nov.-Dec. 1952.
2. Allergenicity of Modified and Processed Foodstuffs, *Journal of Pediatrics*, Vol. 43, No. 4, pg. 423, Oct. 1953.
3. The High Ascorbic Acid Content of the West Indian Cherry, *Science*, 103:219, 1946.



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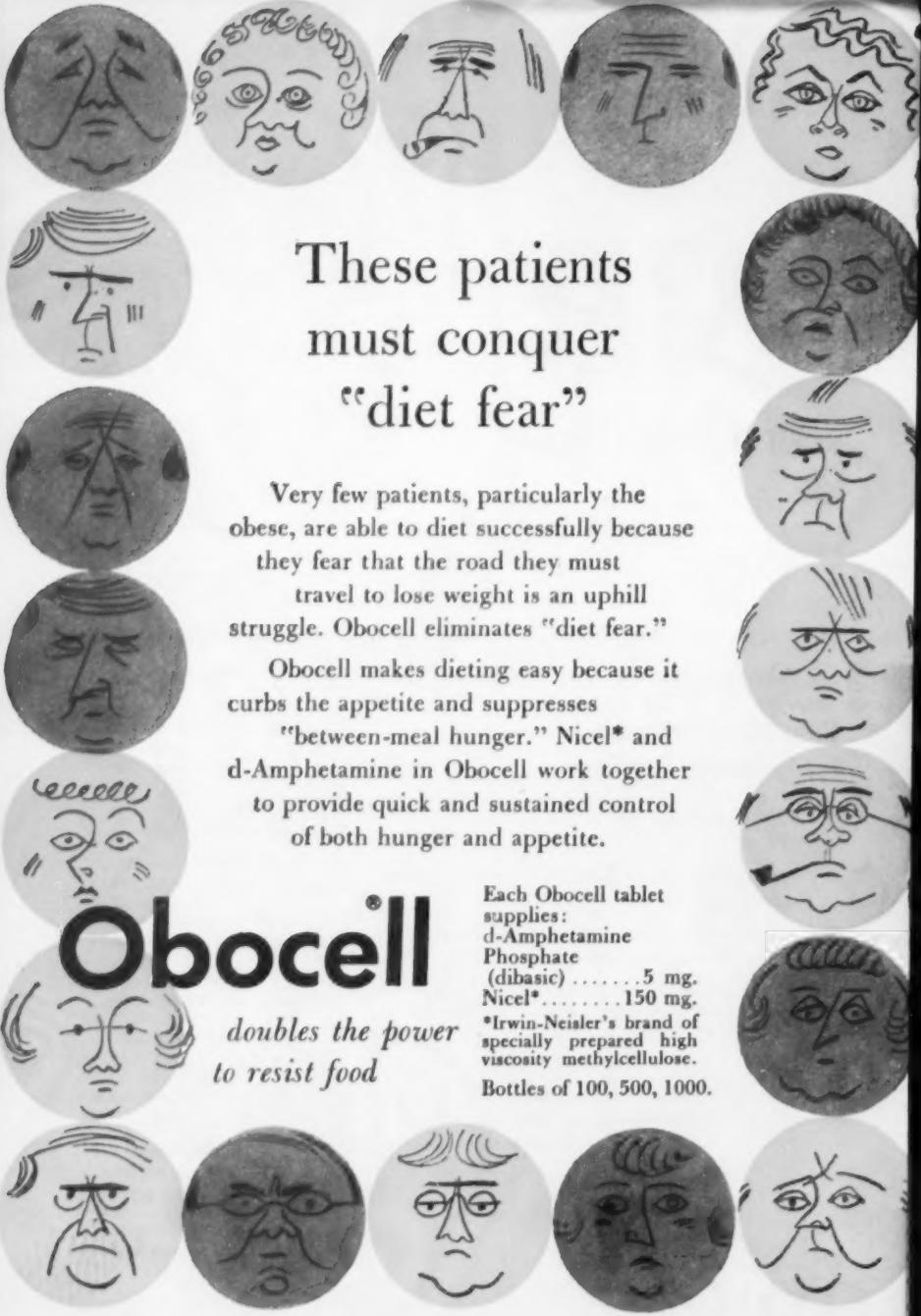


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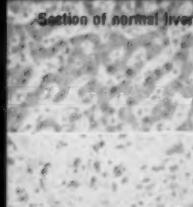
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1. Zeiman, S.: Arch. Int. Med. 80: 141, 1952.



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his method of tonsillectomy using a solid-bladed, dull-edged guillotine. In 1923, his summary of 20,000 cases showed no deaths, no pulmonary abscesses, and 99.6% perfect results. His guillotine procedure required only ten to twenty seconds, and postoperative bleeding was of no consequence.

The guillotine method is dramatic in its speed and ease, but postoperative bleeding is often troublesome. Dr. Unger's timely article has given us a method that seemingly will eliminate this complication.

Certainly when the tonsils are symmetric in size, easily accessible, freely movable, self-contained, and there is no history of repeated peritonsillar abscesses, the Sluder method may be employed.

The presence of clumps of lymphoid tissue in the plica semilunaris, plica triangularis, or tags in the fossa precludes the guillotine method.

M. K. HARTZELL, M.D.
Eugene, Ore.

► TO THE EDITORS: Dr. Unger's technic and suturing instrument are ingenious, but it was during the Saturday morning carnage of five-minute tonsillectomies while interning in a New York City hospital twenty-eight years ago that I first began to question the validity of the method.

I do not remember any paper in a medical publication in recent years with which I disagree so vehemently.

I reason as follows:

• The operation as described cannot completely remove the tonsils.

- If the patient is to be subjected to and pay for a tonsillectomy he deserves at least an attempt at a complete removal.
- Elsewhere in surgery, surgeons insist on the clamp-and-tie technic of hemostasis.
- Tonsillectomy should not be attempted by doctors who lack the skill for careful dissection and knotting in the depths of the throat.
- The only virtues of the Sluder instrument are speed and ease. The sanctity of the surgical operating room is no place for the lazy.

T. L. HYDE, M.D.
The Dalles, Ore.

► TO THE EDITORS: At the Children's Clinic in Seattle all tonsils and adenoids are operated on under general anesthesia. The Beck tonsillotome is used. This is a modification of the Sluder instrument in that the presenting portion is an oval loop containing a fitted wire that surrounds the tonsil when it is pushed through the loop. The wire is tightened, guillotining the tonsil and acting as a hemostat at the same time. With the Sluder technic, a straight blade is forced under the tonsil, which is cut off by pushing the blade into the frame. Dr. Unger's method is excellent, being simple in operation in a bloodless field, rapid, and with little discomfort to the patient.

When the Beck modification is used in children, it is not necessary to dissect or use sutures or stitches at any time; bleeding is minimal. The constricting wire in the loop is slowly tightened for at least two

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MEDICAL FORUM

minutes, at which time the tonsil is completely freed from its capsule. Rare bleeding can be readily controlled by a hemostat when necessary.

I am always amazed to see excellent surgeons struggle with dissection, snare, and suture when such a simple method as Dr. Unger presents is available.

NORMAN W. CLEIN, M.D.

Seattle

► **TO THE EDITORS:** A tonsillectomy by the dissection technic can be performed by any competent laryngologist. This method is satisfactory for patients of all ages, under any type of anesthetic, and regardless of the amount of scar tissue present.

The Sluder technic has some advantages over the dissection method. It is much more rapid. The tonsils are more cleanly removed, with no muscle fibers adhering to the intact capsule. Trauma to the throat is minimal with healing more rapid and postoperative reactions less severe. Hemorrhage must be controlled regardless of the operative technic employed.

The Sluder method of tonsillectomy is a surgical trick, which must be learned in order to perform the operation successfully. Those who know how to do it find it very satisfactory in properly chosen cases. It is contraindicated in the presence of scar tissue, as in secondary operations, when the tonsil remnant is bound down by adhesions, or in cases of repeated quinsy, when dense scar tissue is present.

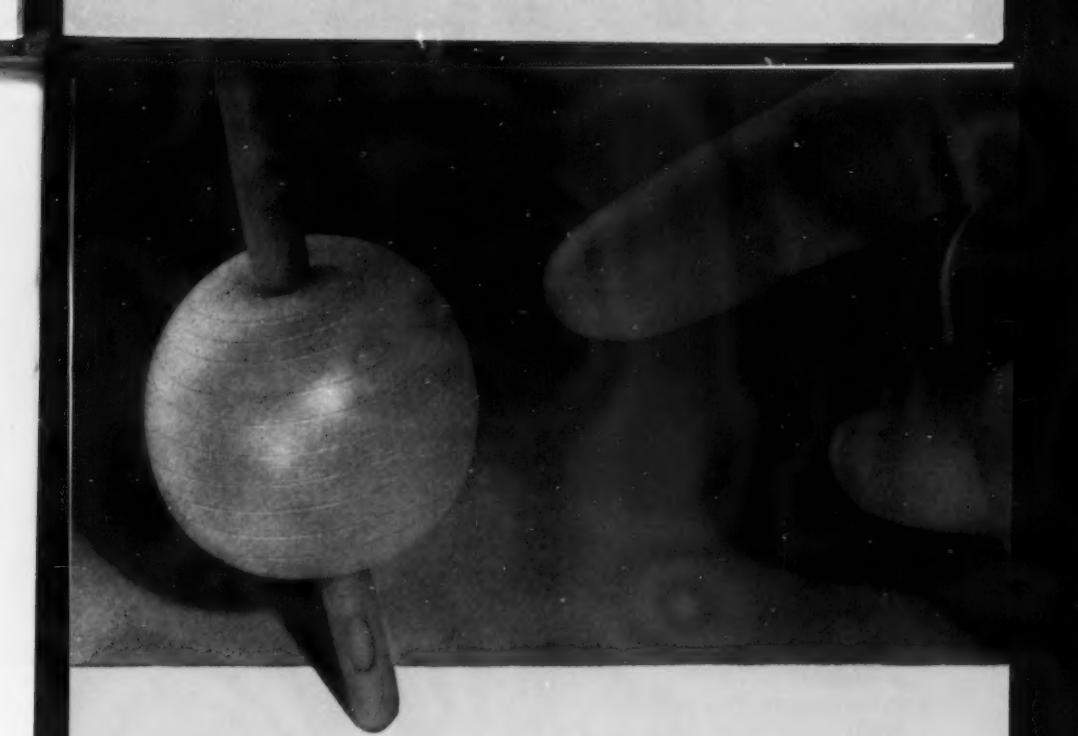
Many tonsillectomists prefer the

Sluder method for children and do not employ it routinely for adults under local or general anesthesia. Possibly, the reason for this is that some operators believe hemorrhage may be more profuse with the Sluder technic. It is not more difficult to control. Dr. Unger's method of placing sutures before the instrument is removed might result in tying off some unnecessary areas or might miss a bleeding point that would require control after the instrument is removed. I prefer clamping and tying the bleeding point under direct vision after removing the tonsil and the instrument.

KENNETH A. PHELPS, M.D.
Minneapolis



" . . . Say, how long have you been on that diet?"



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Diagnostix

Here are diagnostic challenges presented as they confront the consultant from the first clue to the pathologic report. Diagnosis from the Clue requires unusual acumen and luck; from Part II, perspicacity; from Part III, discernment.

Case MM-283

THE CLUE

ATTENDING M.D.: I have a patient with rheumatoid arthritis. I would like your recommendations for therapy.

VISITING M.D.: Is the disease active at present?

ATTENDING M.D.: Yes, new joints recently have been involved. The sedimentation rate is elevated. There is moderate anemia, and the ophthalmologist says uveitis is active bilaterally and is being treated with cortisone ophthalmic drops.

VISITING M.D.: What treatment has been given for the arthritis?

ATTENDING M.D.: Pretty much the whole gamut from aspirin to cortisone.

VISITING M.D.: Without benefit?

ATTENDING M.D.: Nothing remarkable. Aspirin seems to help the pain, but crippling has progressed through the years.

VISITING M.D.: You're sure of your diagnosis? Nothing to suggest any disease other than rheumatoid arthritis?

ATTENDING M.D.: I think we've pretty well excluded other conditions. The only thing that bothers me is that the patient has had recurrent diarrhea for ten years.



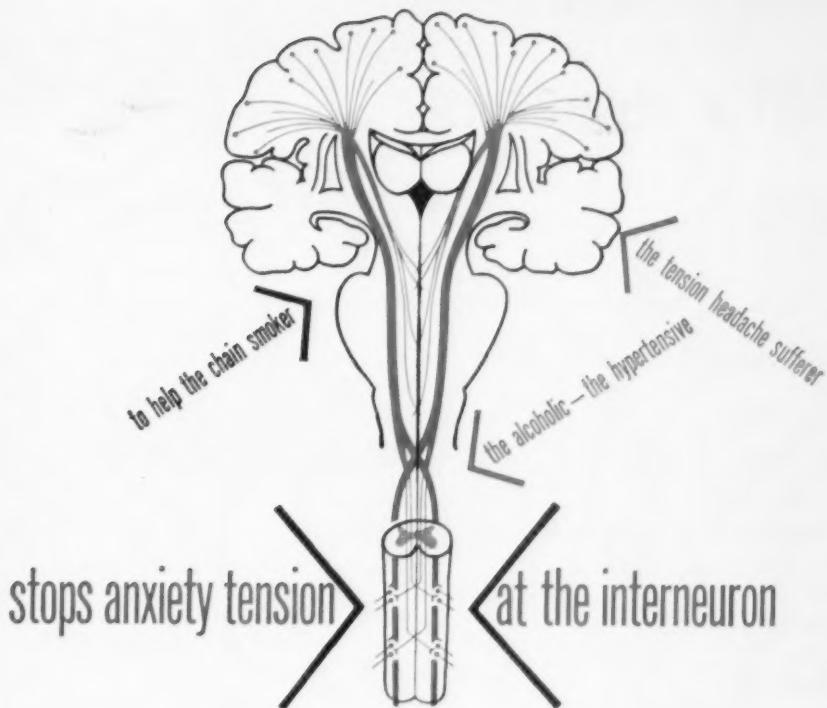
PART II

VISITING M.D.: Diarrhea for ten years? Give me some idea of the severity.

ATTENDING M.D.: What it amounts to is 3 or 4 soft, semiformed movements each day, with periods of explosive diarrhea at irregular intervals that last several days to a week or so.

VISITING M.D.: I assume you have not found the cause for this bowel complaint. Let's not get ahead of ourselves. Give me the whole history.

ATTENDING M.D.: Well, the patient is a 30-year-old housewife whose presenting complaint was painful joints. She has not been in good



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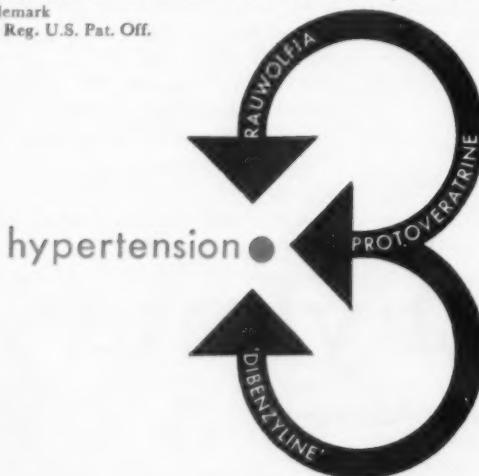
Rauwolfia serpentina	25 mg. equiv. (whole root)	(biologically assayed)
Protoveratrine	0.2 mg.	
Dibenzylinet	5 mg. (phenoxybenzamine hydrochloride, S.K.F.)	

To obtain best results with 'Mio-Pressin', it is of utmost importance to read carefully the Administration and Dosage suggestions in the 'Mio-Pressin' literature.

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'Mio-Pressin'

DIAGNOSTIX

health since shortly after the birth of her only child ten years ago.

VISITING M.D.: Was the pregnancy normal?

ATTENDING M.D.: Yes, pregnancy and delivery were both uneventful, and lactation was successful. The menses resumed five months post partum, and about the same time she began having diarrhea and crampy lower abdominal pains. The diarrhea was acute for a period of two months.

VISITING M.D.: Was blood found in the stools?

ATTENDING M.D.: No, and not since, either. A barium enema and stool studies were done at that time, with negative results. The patient

was fed a low-residue diet and given antispasmodics and sulfasuxidine. She improved on this regimen.

VISITING M.D.: As I understand it, since then she has continued to have soft stools.

ATTENDING M.D.: That's right. The least digression from her strict low-residue diet seems to cause diarrhea.

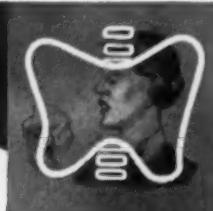
VISITING M.D.: When did the arthritis begin?

ATTENDING M.D.: About six years ago during an acute spell, she had migratory polyarthritis which disappeared completely in a matter of weeks. Since then, each exacerbation of bowel trouble has been associated with at least

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Cheney, M. C.: GP 10: 32 (July) 1954.



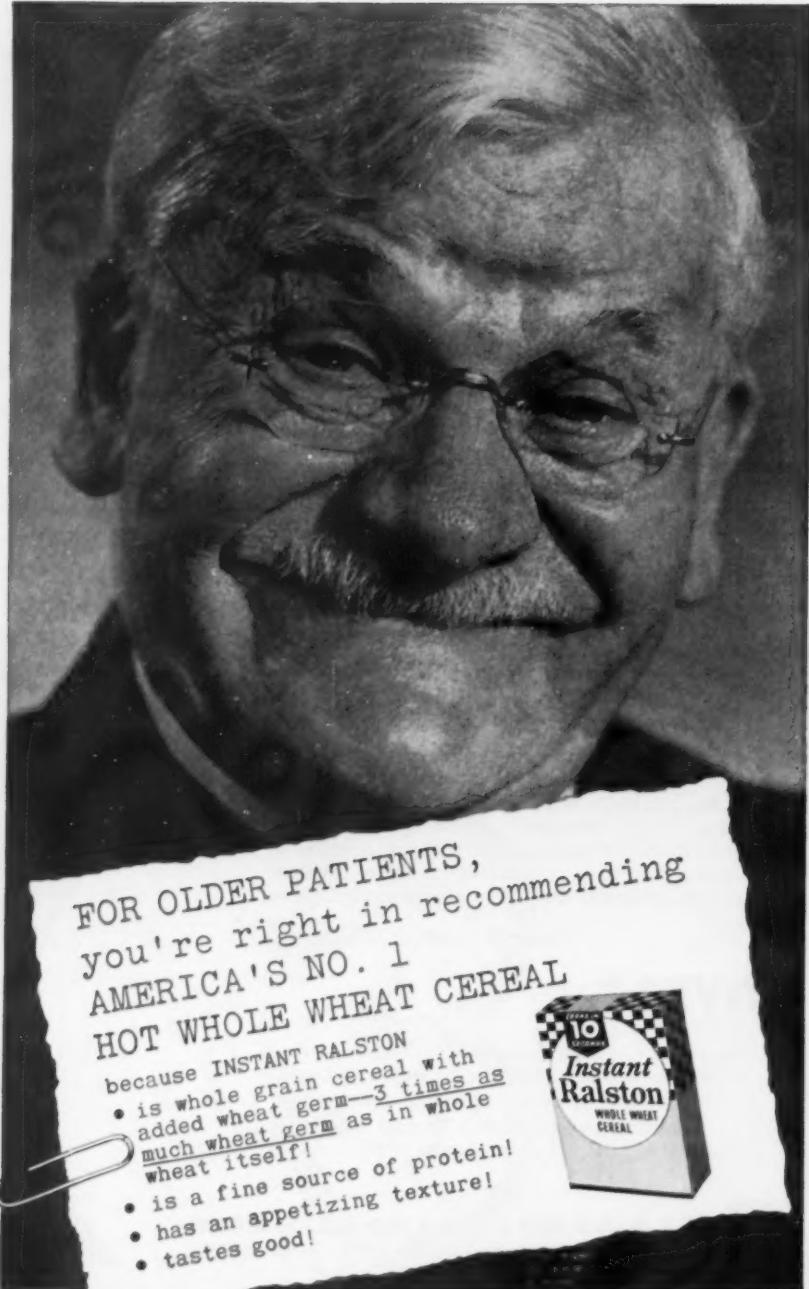
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DIAGNOSTIX

arthralgia and, on numerous occasions, with true arthritis. At the present time, most of the body joints reveal previous involvement.

VISITING M.D.: And then the uveitis. Is that recent?

ATTENDING M.D.: Apparently so. There are no synechiae and few symptoms, although refraction reveals moderate loss of visual acuity bilaterally.

VISITING M.D.: Of course, uveitis does occur in a small number of patients with rheumatoid arthritis, but I am unaware of diarrhea being a complication of rheumatoid disease. I am sure that you have examined the patient's digestive tract thoroughly.

ATTENDING M.D.: Yes, we found gastric acids to be normal, gastrointestinal studies negative, no pancreatic calcification on roentgenograms, and a normal secretin response. The proctoscopic examination also revealed nothing abnormal.

VISITING M.D.: What about the stool examination?

ATTENDING M.D.: No ova, parasites, or enteritis pathogens were found. Stool fat was not increased. On two occasions, the guaiac test was slightly positive.

PART III

VISITING M.D.: Did physical examination reveal anything other than the joint and eye changes?

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DIAGNOSTIX

ATTENDING M.D: No, except for slight abdominal tenderness in both lower quadrants which was really not very impressive. Motion of shoulders, elbows, hips, and knees was limited. The small joints of the hands and feet were quite deformed. The patient is having physiotherapy now. You can examine her on your next visit. Are there any further diagnostic procedures you would like to have carried out in the meantime?

VISITING M.D: Well, it would be nice to tie the diarrhea and the arthritis together. Ulcerative colitis can cause a severe arthritis as well as inflammation of the eye, but your negative barium enema and proc-

tosopic examinations pretty well exclude that disease. However, we have not as yet eliminated another possibility. Was the terminal ileum visualized at the time that the colonic examination was made?

PART IV

ATTENDING M.D: (*Thumbing through roentgenogram reports*) No mention is made in the report of the terminal ileum. Are you considering the possibility of regional enteritis?

VISITING M.D: Yes, I am. The long history of soft stools and the recurrent acute bouts of diarrhea could be on the basis of a terminal ileitis or regional enteritis

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DIAGNOSTIX

elsewhere in the small bowel. Many of these patients have trouble for several years before a diagnosis is established. I think that you should request a small bowel study with this diagnosis in mind.

ATTENDING M.D: (*Two days later*)

It seems that you have uncovered the cause for this patient's diarrhea. Roentgenographic study of the small bowel with barium reveals 2 areas in the ileum which are interpreted by the roentgenologist as regional enteritis. Both involved segments appear to be 8 to 10 in. in length. One is situated at the terminal ileum, which, incidentally, was not filled during the barium enema examination.

The other segment is a foot or so higher up. Evidence suggests a fistula leading from the upper segment.

VISITING M.D: Despite pathologic differences, both ulcerative colitis and regional enteritis have some complications in common, including arthritis and uveitis. Of course, this woman may have two independent diseases, but I would recommend surgical excision of the diseased bowel. It's unfortunate the enteritis was not discovered before so much joint involvement had occurred. At least we may be able to prevent further progression of the uveitis and further arthritic crippling by removing the bowel lesions.

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Radiation Effect on Adrenals

Biogenesis and secretion of corticoid hormones in isolated adrenal glands of calves are depressed by exposure to gamma rays. Dr. Frank Ungar and associates of the Worcester Foundation for Experimental Biology, Shrewsbury, Mass., and the National Naval Medical Center, Bethesda, Md., determined radioresponsiveness by irradiation of the isolated glands with radiocobalt, perfusion with homologous blood containing ACTH, and assay of the effluents for corticoid content. Definite reductions in hydrocortisone, corticosterone, and unidentified chromogens are indications of adrenal radiosensitivity, although no morphologic changes are observed in the cortices.

Endocrinology 56:30-36, 1955.

Strangulation Obstruction

Deaths of dogs with devascularized obstructed segments of bowel appear to be due to toxins of *Clostridium welchii*. Survival is prolonged when animals are given fluids, electrolytes, and blood. Postmortem examination reveals the affected bowel segment to be black, necrotic, gangrenous, and dilated. However, when animals were treated with preoperative intestinal antisepsis combined with postopera-

tive injections of antibacterial agents directly into the strangulated segment, life was prolonged indefinitely, reports Dr. Isidore Cohn, Jr., of Louisiana State University, New Orleans. *Clostridia* could not be isolated from peritoneal fluids or bowel lumens of animals treated with combinations of Aureomycin, sulfathalidine, streptomycin, and penicillin, and the strangulated segment retained normal histologic and gross appearance.

Am. Surgeon 20:1162-1170, 1954.

Homologous Lung Grafts

Although transplantation of homologous lung tissue is technically feasible in dogs, donor cells are rapidly destroyed by immunologic reactions. Homologous lung transplants in 10 animals resulted in an average survival of six days, with some dogs living fourteen days, report Drs. Eldon E. Ellis and Victor Richards of Stanford University, San Francisco. A sensitivity reaction of host to donor tissue apparently produces necrosis of grafted cells followed by pneumonic infiltration. Transplanted lungs of animals surviving more than one week revealed loss of organ architecture, scattered abscesses, hyalinization, edema, and hemorrhage.

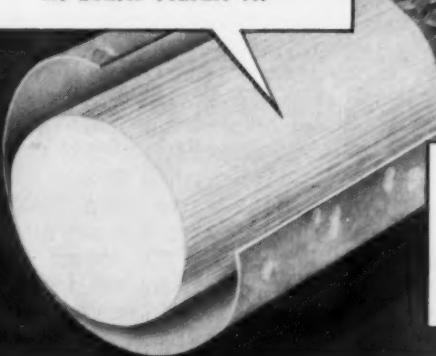
Surgery 36:1109-1114, 1954.



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Myocardial Protein Changes

Molecular conformity and arrangement of proteins are significantly altered in the myocardium of dogs with chronic heart failure. Extracts of protein from hearts of animals with induced chronic failure demonstrate decreased concentrations of the contractile protein, actomyosin; decreased viscosity response to adenosine-triphosphate; and changes in sedimentation patterns, report Dr. Ellis S. Benson and associates of the University of Minnesota, Minneapolis. Partial depolymerization of actomyosin may be directly related to the physical changes in the dilated heart, such as increased diastolic volume, increased tension, and overstretching of the muscle syncytium.

Bull. Univ. Minnesota Hosp. 26:278-290, 1955.

Induced Fetal Malformations

Congenital cardiovascular anomalies occur in 20 to 50% of offspring of rats fed folic acid-deficient diets during gestation. The malformations include interventricular septal defects, persistent truncus arteriosus, double or right aortic arch, failure to develop ductus arteriosus, aberrant origins of the subclavian arteries, and additional variations of embryonic arch derivatives. Although the deficient diet induced the cardiac and vascular deformities when ingested for short periods of only two or three days, the regimen was not harmful when instituted later than the tenth day of gestation, explain Dr. Catherine D. C. Baird and associates of the

University of California, Berkeley. Incidence of anomalies in fetuses exposed to folic acid deficiency during days seven to nine of gestation was 28%; days nine to eleven, 57%; days ten to twelve, 31%; days ten to thirteen, 29%; and days ten to twenty-one, 22%. The diet contained succinylsulfathiazole to depress intestinal synthesis of the vitamin, and the folic-acid antagonist, x-methyl-pteroyl-glutamic acid, to interfere with the functioning of the stored vitamin.

Circulation Res. 2:544-554, 1954.

Prevention of Anoxia

Warmed bassinets or incubators in nurseries to maintain the baby's body temperature may lessen chances for complete recovery of the anoxic infant. Resistance to asphyxiation in neonatal guinea pigs is increased by cooling but decreased by warming. Animals exposed to atmospheres of 95% nitrogen and 5% carbon dioxide lived significantly longer when colonic temperatures were dropped to approximately 20° C., report Drs. James A. Miller, Jr., and Faith S. Miller of Emory University, Atlanta. The number of animals surviving asphyxia increased approximately 50% with each 10° C. decrease in temperature. However, colonic temperatures above 43.5° C. and below 20° C. were lethal. Although rapid rewarming in a bath of 45° C. accelerated recovery of surviving animals, the number of survivors was not increased.

Surgery 36:916-931, 1954.

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¹Bargen, J. A., and
Jackman, R. J.,
Journal Lancet,
72:11, Nov., 1952.



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Weight gain and body growth of immature rats are stimulated by dietary supplements of fish solubles. Adrenal glands, uteri, and ovaries also increase in size, although uteri of ovariectomized females and testes of males are unaltered, report William M. Dickson and associates of the State College of Washington, Pullman. In contrast, Terramycin supplements accelerate growth only in animals subjected to stressful situations such as castration or sham surgery. An increased adrenal weight is observed in intact young rats fed Terramycin, but the gonads are unchanged.

J. Nutrition 54:631-640, 1954.

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Stimulation of Melanin

Hyperpigmentation observed in Addison's disease or pregnancy or after bilateral adrenalectomy may be owing to excess melanocyte-stimulating hormone (MSH) elaborated by the anterior pituitary gland. Healthy individuals or patients with decreased pigmentation due to panhypopituitarism showed rapid increases in pigment and formation of new nevi after injections of purified MSH, report Dr. Aaron Bunsen Lerner and associates of Chicago and the University of Oregon, Portland. Adrenocortical hormones apparently inhibit pituitary secretion of MSH, whereas adrenalin and noradrenalin block the local action of MSH on melanocytes. Pigmentation that occurs after therapeutic administration of ACTH may be the result of contamination with MSH.

J. Clin. Endocrinol. 14:1463-1490, 1954.

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short REPORTS

Serum Levels of Vitamin B₁₂

Diabetic patients with retinopathy have greater vitamin B₁₂ serum activity than do diabetic individuals with no ocular disease. The mean value of serum B₁₂ levels in 16 patients with retinopathy was 292 \pm 24 μ g. per cubic centimeter, compared with serum levels of 162 \pm 18 in 18 patients without retinal lesions, report Dr. Bacon F. Chow and associates of Johns Hopkins University, Baltimore. Individuals with persistent elevations in serum levels were also unable to retain a normal portion of a parenteral test dose of the vitamin, suggesting that alterations in vitamin B₁₂ metabolism may be involved in the pathogenesis of diabetic retinopathy.

Proc. Soc. Exper. Biol. & Med. 87:38-39, 1954.

Therapy of Rheumatic Fever

Combined administration of salicylates and cortisone may produce rapid improvement and prompt decline of erythrocyte sedimentation rates in patients with acute rheumatic fever. Sodium salicylate in daily doses of 1.5 to 2.5 gr. per pound of body weight combined with initial doses of 200 mg. of cortisone produces faster relief of symptoms and decline in the erythrocyte sedimentation rate than do salicylates alone, report Dr. K. S.

Holt and associates of the University of Sheffield, England. Sedimentation rates fell to normal levels in about seventeen days in a group of 10 children receiving combined treatment, compared to about forty and fifty days, respectively, in 2 comparable groups given large and small doses of salicylates only.

Lancet 6849:1144-1148, 1954.

Degree of Exophthalmos

The progression and severity of exophthalmos in man may be estimated by the degree of protuberance produced in the eyes of the common Atlantic minnow, *Fundulus heteroclitus*, Linn., when injected with the patient's serum. The exophthalmos-producing substance is found in significant amounts in the sera of patients with severe or progressive exophthalmos sometimes associated with Graves's disease and in small quantities in normal pooled serum, report Dr. Brown M. Dobyns and Lois A. Wilson of Western Reserve University, Cleveland, and the Cleveland City Hospital. Whole serum from 6 patients with exophthalmos was injected into the coelomic cavities of as many minnows. In each instance, the increase in intercorneal distance in the fish correlated with the status of the disease in the patient.

J. Clin. Endocrinol. 14:1393-1402, 1954.

PEDIATRICS

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BULLETIN

REDUCTION OF PARAPHIMOSIS

ONE of the unpleasant minor emergencies in the care of small children is the development of paraphimosis after retraction of the foreskin. The mother, of course, is instructed to do this to prevent phimosis and often carries it out conscientiously, but occasionally with such persistence that this painful accident occurs. The usual technique of forceful reduction of paraphimosis, after the application of ice to the prepuce and a lubricating ointment to the glans, is time-consuming, painful to the child and distressing to the

family. Occasionally meatotomy is required.

• A recent short report* would indicate that the use of hyaluronidase may make this reduction a simple and untraumatic procedure. In four cases reported, apparently all on adults, injection of 150 turbidity units of hyaluronidase in 1 cc. of isotonic sodium chloride solution caused the edematous ring of paraphimosis to disappear within 10 minutes, so that the prepuce could be reduced "with ease and without pain." This seems a quite logical result from the known actions of hyaluronidase and it is a simple procedure which should be commended to physicians for further evaluation on children.



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*Ratliff, R.D., Hyaluronidase in the Treatment of Paraphimosis: Jour. of the Am. Med. Assoc., June 19, 1954, Vol. 155, p. 746.



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Travert 10%-Electrolyte No. 1	80.0	36.0	4.6	63.0	60.0	—	2.8	Travert 10%	Any
Travert 10%-Electrolyte No. 2	57.0	25.0	—	50.0	25.0	—	6.0	Travert 10%	Any
Travert 10%-Electrolyte No. 3	63.0	17.5	—	150.5	—	70.0	—	Travert 10%	Any
Ammonium Chloride 2.14%	—	—	—	400.0	—	400.0	—	—	IV
Darrow's	121.0	35.0	—	103.0	53.0	—	—	—	Any
M/8 Sodium L-Lactate	167.0	—	—	—	167.0	—	—	—	Any
Travert 10%-Potassium Chloride 0.3% in Water	—	40.0	—	40.0	—	—	—	Travert 10%	Any
Travert 10%-Potassium Chloride 0.3% in 0.45% NaCl	77.0	40.0	—	117.0	—	—	—	Travert 10%	Any
Milligram/100 cc. x valence x 10 atomic weight								= milliequivalent/liter	

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Glycyrrhizic acid, isolated from licorice extract, has metabolic and physiologic effects similar to adrenocortical steroids. When administered to healthy individuals or patients with adrenogenital or Cushing's syndrome, the compound induces retention of sodium, chloride, and water but slightly increases excretion of potassium, report Drs. Lawrence H. Louis and Jerome W. Conn of Ann Arbor, Mich. Inhibition of the pituitary-adrenal system is indicated by decreases in urinary 17-ketosteroids. Circulating eosinophil counts and metabolism of protein, carbohydrate, and uric acid are not significantly altered.

Proc. Cent. Soc. Clin. Res. 27:80, 1954.

Leukopenic Factor

An unknown agent in the blood of patients with idiopathic leukopenia produces transient leukocyte depression when transmitted by transfusion to healthy recipients. Whole blood transfusions from 2 patients with unexplained nonleukemic leukopenia reduced the circulating leukocytes in recipients to 2,000 or 3,000 per cubic millimeter, report Dr. F. Kissmeyer-Nielsen and associates of the University of Aarhus, Denmark. Transfusion from 3 patients with aleukemic leukemia did not alter leukocyte counts in recipients, indicating that the pathogeneses of nonleukemic leukopenia and leukopenia with leukemia differ.

Acta med. scandinav. 150:349-353, 1954.

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Hypophysectomy and Diabetes

Ablation of the pituitary gland has been studied in carefully selected diabetic patients with progressive retinal or renal damage but with adequate renal reserve. Dr. Laurence W. Kinsell and associates of the Samuel Merritt and Highland Alameda County hospitals, Oakland, Calif., report that hypophysectomy was successful in 2 of 4 patients; 2 died, 1 of renal and cardiac insufficiency and 1 of coronary occlusion. Postoperative insulin hypersensitivity can be balanced by proper cortisone or hydrocortisone therapy.

Diabetes 3:358-366, 1954.

Preserved Vessel Grafts

Homologous or heterologous arterial segments, stored in 70% alcohol at room temperature for prolonged periods, are as effective as homografts preserved in a living condition. The devitalized vessel segments were used to replace aortic deformities or injuries in 11 patients, including 2 individuals with aneurysms of the abdominal aorta. Complete success of the alcohol-stored grafts was observed in 7, questionable results in 1, and failure in 3 individuals, report Dr. Seiji Kimoto and associates of the University of Tokyo. Heterografts from dog or sheep, utilized in 5 of the 11 patients, produced results equal to those with homologous grafts or viable-preserved specimens. Alcohol-stored homografts in dogs were replaced except for elastic fibers by host tissue in approximately three months. Donor elastic fibers remain for at least one year.

Arch. Surg. 69:549-563, 1954.

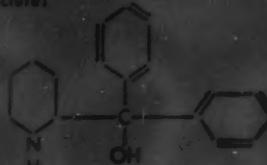
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Meratran

Actions: Meratran is an entirely new and different central stimulant that acts on the subcortical area of the brain. This portion of the brain is thought to expedite or facilitate intellectual activity which originates in the cortex. Meratran, when administered to the emotionally tired and depressed patient, subtly restores him to his usual level of alertness, interest and productivity.^{1,2}

Indications: Emotional fatigue, unhappiness of more common type [financial worry, social stress]. Situational stress or mild depression. Adjunctive therapy in certain psychoses and psychoneuroses.^{3,4}

Composition: alpha-(2-piperidyl) benzhydrol hydrochloride with the following structure:



Dosages: For emotional fatigue and mild depression, 1 to 6 mg. daily. Individual patient response must be observed and daily dosage and duration of administration adjusted to patient response.

Supplied: Small pink tablets containing 1 mg. Meratran (piperidyl) hydrochloride.⁵ Bottles of 100.

1. Brown, B. B., and Warner, N. W. Pharmacologic Studies on a New Type of Central Stimulant. Pediatr. Proc. 12:304, 1952.
2. Brown, B. B., and Warner, N. W. Pharmacologic studies on a new central stimulant, alpha-(2-piperidyl) benzhydrol hydrochloride. J. Pharmacol. and Exp. Ther. 110(160), 1954.
3. Brown, B. B., and Warner, N. W. The administration and action of alpha-(2-piperidyl) benzhydrol hydrochloride. Pediatr. Proc. 13:237, 1954.
4. Heath, E. C. Discussion of paper by Howard B. Fehling (alpha-(2-piperidyl) benzhydrol hydrochloride, a new central stimulant in the treatment of psychoneurosis, somatic fatigue and senescence) presented before the American Neurological Association, Atlantic City, June 14, 1954.
5. Fehling, H. D., Kimoto, S., and Heath, E. C. Clinical studies on alpha-(2-piperidyl) benzhydrol hydrochloride, a new central stimulant. Presented before the American Psychiatric Association, St. Louis, Missouri, May 3, 1954.
6. Fehling, H. D. Alpha-(2-piperidyl) benzhydrol hydrochloride, a new central stimulant, in the treatment of psychoneurosis, somatic fatigue and senescence: preliminary report (Mellan Peters Demonstrated). American Neurological Association, June 14, 1954.
7. Haworth, R. B. Discussion of paper (alpha-(2-piperidyl) benzhydrol hydrochloride, a new central stimulant in the treatment of psychoneurosis, somatic fatigue and senescence) presented before the American Psychiatric Association, May 3, 1954.

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- no appreciable effect on blood pressure and respiration
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has no fear of
acid indigestion



Although toothless and dependent on armor for defense, the giant pangolin (*Manis gigantea*) of Equatorial Africa is capable of fearing some damage with his extremely long and powerful claws. Besides eating soft-bodied termites, the pangolin feeds imperturbably on formic acid-secreting ants.

Homo sapiens, even without ants in his diet, is much more susceptible to gastric hyperacidity. For the distress of heartburn, dyspepsia, peptic ulcer, TITRALAC is a logical prescription. It gives relief in minutes that continues for hours. This was shown by *in vitro* tests on 16 commonly used antacids. In this study, TITRALAC

"...brought the pH up the most rapidly and to the highest level of all the preparations which were investigated. The sustaining power was stronger, in addition."

Hammelund, E. R., and Rosing, L. W.,
J. Am. Pharm. A. (Scient. Ed.) 41:395, 1952.

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Serum Cholinesterase

Alteration of amounts of serum cholinesterase may furnish valuable confirmatory evidence for the diagnosis of parenchymal liver damage and, in some instances, may be the only indicator of hepatic dysfunction. Both low values of serum cholinesterase and abnormalities in other liver function tests are observed in patients with acute parenchymatous liver disease. However, depressed cholinesterase levels may be the only abnormal finding in patients with neoplastic metastases or lymphomatous involvement of the liver, report Dr. David W. Molander and associates of the Pack Medical Group, New York City. Varying concentrations of cholinesterase are found in patients with chronic liver disease. Determinations are made by colorimetric measurement of acetic acid liberated by serum cholinesterase hydrolysis of known amounts of acetylcholine.

Ann. Int. Med. 41:1139-1151, 1954.



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Dose: 1 capsule 1/2 hour before meal.

Bottles of 100 capsules.

Index of Adrenal Activity

The potent stimulatory effects of corticotropin gel on the adrenal cortex may facilitate diagnosis of Addison's disease. The healthy individual or patient with secondary adrenocortical atrophy usually has rapid reduction in eosinophil count to 10 per cubic millimeter, and in a sodium-potassium ratio to less than 50% of initial level after 3 intramuscular injections of 120 units of the gel on consecutive days, declares Dr. J. D. N. Nabarro of University College, London. No urinary or eosinophil change after injections indicates adrenocortical insufficiency. Definite diagnosis of Addison's disease is established by determination of 17-ketosteroid excretion.

Lancet 6848:1101-1104, 1954.

Improvement of Vitiligo

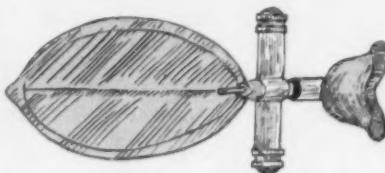
Repigmentation of vitiliginous areas may be initiated by topical applications of extracts of the plant *Ammi majus* and exposure to ultraviolet light. Of 18 patients with vitiligo treated four to six months with Ammoidin alone or with Ammidin, 4 patients improved more than 50%, 6 had fair return of color, 3 had slight repigmentation, and 5 were unaffected, reports Dr. Molleurus Couperus of the College of Medical Evangelists, Los Angeles. After topical application, the affected areas are exposed to increasing doses of ultraviolet light, limited by the degree of inflammatory reaction. All patients developed hypersensitivity to ultraviolet irradiation,

manifest by erythema, edema, and sometimes vesiculation and bullae formation. Depigmentation occurred in 1 patient after a temporary cure; most patients have not been observed for sufficient periods of time to evaluate the permanence of repigmentation.

California Med. 81:402-406, 1954.

Portable Gas Machine

A lightweight portable apparatus provides rapid, effective anesthesia and can also be adapted for resuscitation. The machine, weighing a total of 17 oz., has 2 reservoirs to accommodate pressurized vials of anesthetic and oxygen or oxygen alone. Oxygen, cyclopropane alone or combined with nitrogen, and nitrous oxide have been packaged under pressure and used without complications in 386 patients, reports Dr. Robert A. Hingson of Western Reserve University, Cleveland. Cy-



clopropane vials, containing about 3,000 mg, produce stage 3, plane 2 anesthesia for short periods in either adults or children. With addition of an Oxford-type corrugated bellows rebreathing bag and use of 100% oxygen, the instrument becomes a simple and effective ventilator.

J.A.M.A. 156:604-606, 1954.

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**BILATERAL
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in patient age 65.
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one week and 25 mg. every
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2 weeks and healing
within 6 weeks.

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for four days and 50 mg.
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completed in 10 weeks.

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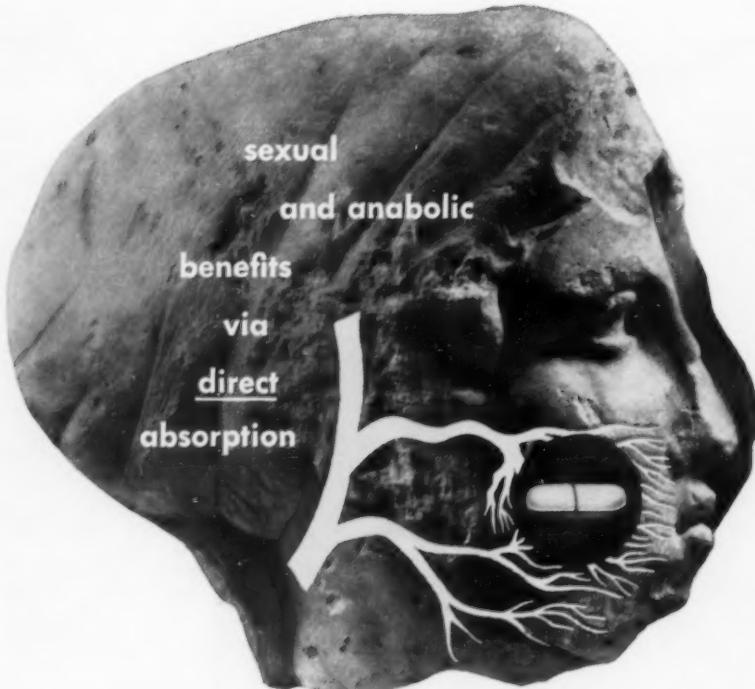
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Herpetic Varicella

The viral agent of herpes zoster produces varicella indistinguishable from ordinary chickenpox. Dr. R. E. Hope Simpson of the Public Health Laboratory Service, Cirencester, England, reports that symptoms and immunologic manifestations are identical in patients with ordinary chickenpox and in those with the disease contracted from individuals with herpes zoster. Complete cross-immunity between herpes zoster, common chickenpox, and varicella due to herpes zoster also indicates that the same pathogen causes all 3 diseases.

Lancet 267:1299-1302, 1954.

Control of Arrhythmias

Ventricular tachycardia, asystole, or fibrillation of the Morgagni-Stokes-Adams syndrome and hyperactive carotid sinus phenomenon may be controlled with isopropylnorepinephrine (Isuprel or I.P.N.). This sympathomimetic derivative of epinephrine appears to be more active than the parent compound in increasing the cardiac rate and amplitude of myocardial contractions while producing less tendency toward cardiac automaticity, observe Drs. E. E. Schumacher, Jr., and C. L. Schmock of the Henry Ford Hospital, Detroit. Ventricular fibrillation or tachycardia was not induced in any of 28 patients after subcutaneous or sublingual administration of I.P.N. In patients with complete auriculoventricular block, I.P.N. significantly increases the rate of the pacemaker which usually

relocates in the vicinity of the auriculoventricular node. When heart block is incomplete, I.P.N. acts primarily upon the sinus area. A rise of 10 to 20 mm. Hg in systolic and a similar drop in diastolic blood pressure are generally observed.

Am. Heart J. 48:933-940, 1954.

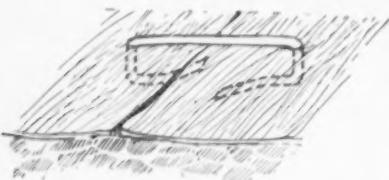
Theory of Carcinogenesis

Varied degrees of immunologic reactions to altered protein complexes within tissue cells may explain the infinite gradations characteristic of neoplasia. Dr. H. N. Green of the University of Sheffield, England, postulates that tumor-inhibiting, noncarcinogenic polycyclic hydrocarbons alter protein complexes to form isoantigens, which in turn stimulate production of homologous antibody. The antibody response to the tumor-inhibiting compounds effectively destroys transplanted tumors in mice and rats. The mechanism of induction of tumors with carcinogenic hydrocarbons is similarly explained by the same procedure of initial isoantigen conversion in addition to potent hyperplastic stimulation. Intense immune reactions may destroy the precancerous cell or may finally induce neoplastic adaptations which render the cells resistant to the homologous antibody. The greater the adaptation, the more malignant and metastatic the tumor. Viruses, ionizing radiations, or prolonged hyperplasia alone may also induce protein changes in cells, responsive immune reactions, and eventual emergence of an adapted cancerous cell.

Brit. M. J. 4901:1374-1380, 1954.

Closure of Abdominal Fascia

Rigid wire may be superior to flexible materials for closure of abdominal fascia. Made of spring-tempered stainless steel, the preformed, rectangular sutures described by Dr. Paul I. Hoxworth of the University



of Cincinnati and associates provide advantageous distribution of forces over supporting fascia. The ends of the suture are flared for easy visibility during placement and are cut at an angle of 30° for ease of penetration (see illustration). A comparison of sutures in wounds of dogs and in inanimate materials reveals that holding power is increased by rigidity.

Ann. Surg. 140:270-282, 1954.

Familial Cerebral Syndrome

Death of 4 siblings, caused by a previously undescribed cerebral dysfunction distinct from known infantile cerebral degenerative diseases, is reported by Dr. John H. Menkes and associates of the Children's Medical Center and Harvard University, Boston. The familial disease was characterized by onset of symptoms between the third and fifth days of life followed by rapid progression and death within two weeks. The syndrome began with difficulty

in feeding, abolishment of the Moro reflex, and development of irregular jerky respirations. The urine had a striking odor resembling maple syrup. Urinary analyses failed to identify the odoriferous compound. Later developments included generalized rigidity and opisthotonus, although convulsions were usually not prominent. Paralysis, hemiparesis, or nystagmus was not observed. Autopsy revealed no cerebral malformations, lipoid storage derangement, inflammation, or myelin degeneration.

Pediatrics 14:462-467, 1954.

Diagnosis of Prostate Tumor

Stilbestrol-induced reductions of acid phosphatase concentrations in prostatic fluids may indicate carcinomatous involvement of the prostate gland. Daily doses of 10 mg. stilbestrol were administered for seven days to 9 patients with carcinoma of the prostate, to 5 with chronic prostatitis, to 5 with benign prostatic hypertrophy, and to 4 healthy individuals. Dr. Jaber Muhseen of Ohio State University, Columbus, reports that only the patients with carcinoma had significant reduction in prostatic acid phosphatase levels. The greatest depression in phosphatase concentration occurred in patients sensitive to anti-androgen therapy, indicating that the test may detect carcinomas resistant to hormone therapy and may also determine the androgenic activity of the various synthetic estrogens.

J. Urol. 72:928-933, 1954.

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EFFECTIVE IN REFRACTORY CASES...

Doyle and Livingston report that 63 of 100 patients benefited from "Mysoline" therapy after they had failed to respond to maximum dosages of other anticonvulsants for at least one year. Seizures were completely controlled in 30 and the number of seizures was markedly reduced in 20.¹

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Lambros notes that over 80 per cent of 208 patients experienced a "feeling of being more alert" and showed "improvement in mental ability to do tasks which previously were burdensome." He considers this a gratifying effect of "Mysoline" therapy in addition to the control of seizures.³

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An extensive bibliography supporting the value of "Mysoline" is included in the literature which is available to physicians upon request.

1. Doyle, P.J., and Livingston, S.: J. Pediat. 43:413 (Oct.) 1953.
2. Forster, F.M.: M. Ann. District of Columbia 23:137 (Mar.) 1954.
3. Lambros, V.S.: Personal Communication.

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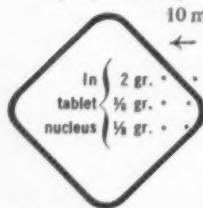
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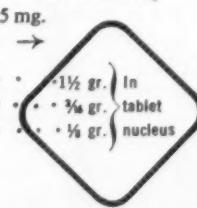
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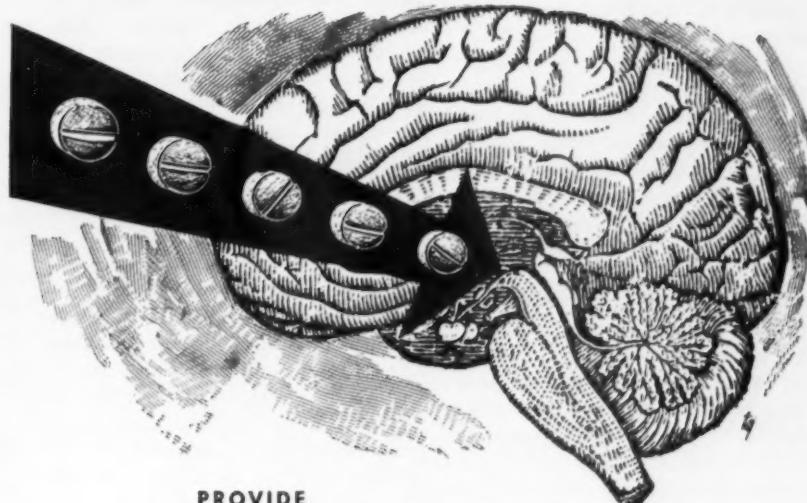
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Substitute Lobotomy

Irradiation of the brain with high frequency sound has the beneficial effect of surgical lobotomy without producing unintentional damage to surrounding brain tissue. Intractable pain due to metastatic neoplasms is partially or completely relieved by ultrasound therapy, reports Dr. P. A. Lindstrom of the University of Pittsburgh. Anxiety, depression, narcotic addiction, and behavior problems are also significantly improved, and patients show no inertia, stupor, incontinence, convulsions, electroencephalographic changes, or loss of insight and judgment. Parasagittal trephine openings of $1\frac{1}{2}$ in. are made over the prefrontal areas, and the ultrasonic beams are directed through the dura in the direction of the anterior tip of the lateral ventricle on each side. Ultrasound of 7 watts per square centimeter at 1,000 kilocycles per second is transmitted to the brain through Ringer's solution. Animal studies and human autopsy material demonstrate minimal, graded lesions in the white matter, with little cortical damage. *Arch. Neurol. & Psychiat.* 72:399-425, 1954.

Maintenance of Hypotension

The intramuscular administration of Veriloid-in-Oil produces a slow and prolonged hypotensive effect in patients with hypertensive emergencies and induces less nausea and vomiting than the aqueous intramuscular preparation. However, although the corn-oil depot preparation obviates frequent injections, neither form of Veriloid for intra-

muscular injection produces as consistent and reproducible effects as does intravenous Veriloid. Dr. Ralph V. Ford and associates of the Jefferson Davis and Veterans Administration hospitals and Baylor University, Houston, suggest that Veriloid-in-Oil may be administered at twelve-hour intervals, beginning with 2 mg. and increasing or decreasing the dose by 0.5 mg. until a satisfactory reduction in blood pressure has been established without prohibitive side effects. Time intervals between injections may then be adjusted to maintain the hypotensive state. Administration of the oil preparation to 24 hypertensive patients in crisis demonstrated that an average optimal dose of 3.5 mg. was effective within two hours and maintained effect for about six hours.

Am. Heart J. 48:123-129, 1954.

Nonelectric Roentgenography

A portable roentgen apparatus utilizes radioactive thulium 170 as the source of roentgen rays. Under development at the Argonne National Laboratory by Dr. Samuel Unterman, the apparatus may revolutionize the field of diagnostic roentgenography, believes Dr. Franz J. Lust of New York City. Thulium, a rare earth of atomic weight 169, is irradiated with slow neutrons to form thulium 170. Thulium 170 emits gamma rays with a voltage of 84 kilovolts in addition to intense beta radiation and is believed to disintegrate into ytterbium 170 which emits the x-rays.

Am. J. Digest. Dis. 21:341, 1954.

Functional Disorders of
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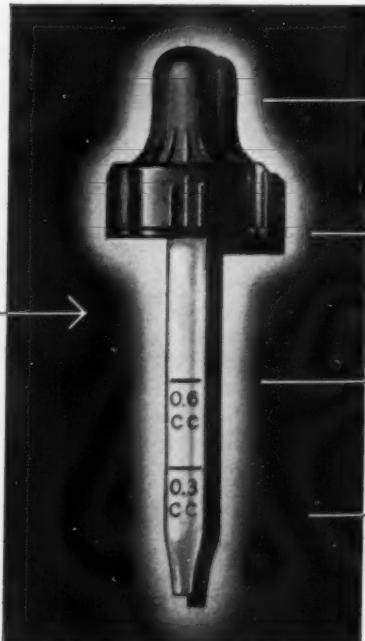
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<i>Phenobarbital</i>	<i>20.0 mg.</i>

Adult Dosage: 4 to 6 tablets daily.


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Dis. Chest 27:27-30, 1955.



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SHORT REPORTS

Goitrogenic Effect of Cobalt

Suppressed function and extensive hyperplasia of the thyroid gland may be a toxic manifestation of cobalt therapy. Dr. Joseph P. Kriss and associates of Stanford University, San Francisco, warn that cobalt therapy should be used only if indications are urgent, and then with caution. The antithyroid effect was observed in 4 children and 1 adult given enteric-coated cobaltous chloride for treatment of anemia. All patients showed hyperplasia of the thyroid, with visible goiters in 3, demonstrable depression of thyroid function in 3, and acute myxedema in 1. Function returned after cessation of cobalt therapy.

J.A.M.A. 157:117-121, 1955.

Combined Therapy of Mycoses

High levels of methyltestosterone combined with moderate amounts of meth-dia-mer-sulfonamides may arrest the course of deep mycotic infections. Doses above 100 mg. of methyltestosterone combined with the sulfonamides produced immediate and prolonged improvement in 1 patient with extensive and 1 with localized histoplasmosis and in 1 individual with disseminated coccidioidomycosis, reports Dr. John H. Lamb of the University of Michigan, Ann Arbor. In 1 case, histoplasmosis recurred after one and one-half years. Therapy may induce slight creatinuria and gynecomastia and inhibit spermatogenesis.

Arch. Dermat. & Syph. 70:695-712, 1954.



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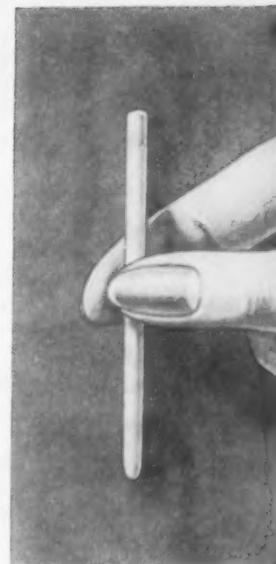
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1. Youngblood, V. H.: J. Urol. 70: 926, 1953.

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SHORT REPORTS

Gastrectomy Effect on Heart

Postprandial changes in electrocardiograms from patients with gastrectomies probably are due to mechanical distention of the gastric pouch and small intestine. Ingestion of large volumes of cold water induced significant lowering of the T wave in 5 of 7 patients with Polya gastrectomies and in 6 of 10 healthy individuals, reports Dr. Leon Brotmacher of the Royal Infirmary, Cardiff, Wales. Warm liquid may reduce the extent of the changes. No comparable alterations were elicited in 4 patients with Billroth I gastrectomies, which have no equivalent of the afferent jejunal loop left after the Polya operation.

Lancet 267:1307-1308, 1954.

Common Respiratory Viruses

Cultures of adenoid and tonsillar tissue and of nasopharyngeal and conjunctival secretions from persons with respiratory illnesses reveal several previously unrecognized type-specific viruses. Of 143 isolated strains, all were identifiable as members of 6 immunologic viral types, report Dr. Robert J. Huebner of Georgetown University, Washington, D. C., and associates. Serologic surveys indicate that all 6 types cause frequent infections. Neutralizing antibodies are type specific with little heterotypic responses, whereas complement-fixing antigens are group specific and shared by all 6 types.

New England J. Med. 251:1077-1086, 1954.

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*Lehrer, H. W. et al.
Ohio St. M. J. 47:44, 1951.





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Arch. Surg. 69:694-706, 1954.



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*Fremont, R. E.; Rimmerman, A. B., and Shaftel, H. E.: Postgrad. Med. 10:216, 1951.

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*Eisfelder, H. W.: Am. Pract. & Dig. Treat., 5:778 (Oct. 1954).

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REFERENCES:

1. Blanchard, K. and Ford, R. A., Effective Antitussive Agent in the Treatment of Cough in Childhood, *Journal-Lancet*, 74:443, Nov., 1954.³ 2. Cox, L. J. and Frederik, W., Comparative Clinical Effectiveness of Cough Medication, *Amer. Pract. and Dig. Treat.*, Vol. 2, p. 844, October, 1951.⁴

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with therapeutic doses



With usual doses of Terfonyl the danger of kidney blockage is virtually eliminated. Each of the three components is dissolved in body fluids and excreted by the kidneys *as though it were present alone*. The solubility of Terfonyl is an important safety factor.

Terfonyl contains equal parts of sulfadiazine, sulfamerazine and sulfamethazine, chosen for their high effectiveness and low toxicity.

Terfonyl Tablets 0.5 Gm. Bottles of 100 and 1000

*Terfonyl Suspension, 0.5 Gm. per 5 cc.
Appetizing raspberry flavor • Pint bottles*

SQUIBB A NAME YOU CAN TRUST

*TERFONYL is a Squibb trademark.

In this...
"the Commonest
Disease of
Civilized
Man"

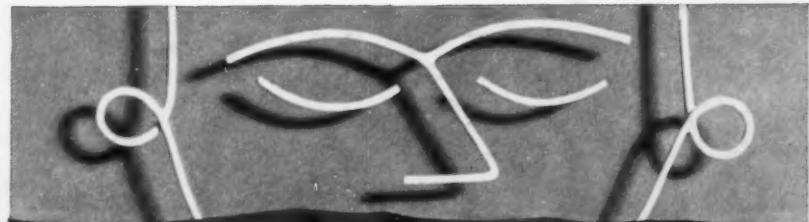


- In hypertension, management can now be started in the earliest stages . . . to retard progression, with the goal of prolonging useful life.
- Fully one half of all cases of mild, labile hypertension can be controlled with simple Rauwiloid therapy.
- Rauwiloid accomplishes what mere sedation cannot . . . the patient is spared the reaction to tension situations without somnolence, without clouded sensorium, without change in alertness.
- The feeling of well-being engendered by Rauwiloid may become manifest as soon as 24 to 48 hours after the first dose. Its antihypertensive effect becomes apparent in two to three weeks.
- In the face of tension-producing stimuli, Rauwiloid, through its sedative and bradycrotic properties, provides tranquil equanimity.
- Its dosage schedule is uncomplicated, definite, easy to follow: Merely 2 tablets at bedtime. For maintenance, 1 tablet usually suffices. No contraindications.

Rauwiloid® *First Thought*
IN HYPERTENSION

Riker

LABORATORIES, INC., LOS ANGELES 48, CALIF.



DORIDEN

totally new nonbarbiturate hypnotic-sedative

In most cases—

Rapid onset—15-20 minutes

Lasts 4-8 hours

No hangover

Dosage:
0.25 to 0.5 Gm.
before bedtime.

Scored 0.25- and 0.5-Gm.
tablets.

C I B A Summit, N.J.

MODERN MEDICINE
84 S. 10 St., Minneapolis 3, Minn.

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